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## ABSTRACT

This document presents the results of a survey questionnaire of undergraduate education in sociology sent in spring 1991 to a nationally representative sample of 597 four-year colleges and universities. The data from 502 responding four-year colleges and universities (out of 529 eligible institutions) were weighted to provide national estimates about instructional staff, computer resources, course offerings, and issues and concerns in undergraduate education in sociology. Results showed that most of the nation's four-year colleges and universities had sociology programs, and that most institutions with sociology programs offered bachelor's degrees in the subject. Twenty percent offered master's degrees, 10% doctorates, and 5% associate degrees. About half of the chairs of departments with sociology programs stated that the number of students who declared a major in sociology had increased in the last five years. When evaluating components of undergraduate education in sociology, department chairs assessed curriculum and faculty/staff resources more positively than the academic preparation and interest and motivation of students. The academic preparation of entering freshmen was ranked as the most important issue of concern to chairs of departments with sociology programs. Other issues ranked as major concerns were student interest and motivation, computer background of students, recruiting and retention of qualified faculty, and appropriateness of class size for introductory courses. All students had access to campus-wide computer resources, but only 37% of respondents stated their department offered undergraduates access to departmental computers. Full time faculty members teaching sociology to undergraduates were 84% White, non-Hispanic; 8% Black, non-Hispanic; 4% Hispanic; 3% Asian; and 1% nonresident alien. A mean of 82% of the instructional contact hours was taught by full-time faculty. (DK)

# SURVEY ON UNDERGRADUATE EDUCATION IN SOCIOLOGY

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# H E S Higher Education Surveys

Higher Education Surveys Report  
Survey Number 15 - Sociology  
December 1992

A Survey System Sponsored by the National Science Foundation, the National Endowment for the Humanities, and the U.S. Department of Education

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# **SURVEY ON UNDERGRADUATE EDUCATION IN SOCIOLOGY**

Sponsored by:

The National Science Foundation  
Directorate for Social, Behavioral, and Economic Science  
Division of Science Resources Studies

Written for:

The National Science Foundation  
Directorate for Social, Behavioral, and Economic Science  
Division of Social, Behavioral, and Economic Research

and

Directorate for Education and Human Resources  
Division of Undergraduate Education

Written by:

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Higher Education Surveys Report  
Survey Number 15 - Sociology  
December 1992

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- Cora B. Marrett, Assistant Director, Directorate for Social, Behavioral, and Economic Science, National Science Foundation
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- Robert F. Watson, Director, Division of Undergraduate Education, National Science Foundation
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- Mary J. Golladay, Program Director, Education and Human Resources Program, Division of Science Resources Studies, National Science Foundation

Other individuals at the National Science Foundation also contributed to the questionnaire design and presentation of survey results.

From Westat, Pat Cruz was the data preparation supervisor for the survey, and Debbie Alexander supervised the telephone followup. Mary Jo Nolin assisted with report preparation.

We also acknowledge the indispensable contribution of the many department chairs, faculty, and staff members at the sampled institutions who reviewed and completed the survey questionnaire.

## Highlights

In spring 1991, a survey questionnaire of undergraduate education in sociology was sent to a nationally representative sample of 597 four-year colleges and universities. Of these, 529 had an undergraduate sociology department or a department with a sociology program, and met the criteria for inclusion in the study. The remaining 68 institutions did not meet the criteria. Responses were received from 502 of the 529 eligible institutions. The data were weighted to provide national estimates about instructional staff, computer resources, course offerings, and issues and concerns in undergraduate education in sociology.

- Most (86 percent) of the Nation's four-year colleges and universities had sociology programs. For research, doctoral, and comprehensive institutions, 90 percent or more had departments with programs in sociology. A somewhat smaller proportion, 79 percent, of liberal arts colleges had programs in sociology.
- Most colleges and universities with sociology programs (90 percent) offered bachelor's degrees in sociology; 20 percent offered master's degrees, 10 percent offered doctorates, and 5 percent, associate's degrees.
- About half (56 percent) of the chairs of departments with sociology programs stated that the number of students who declared a major in sociology had increased in the last five years. Slightly over one-third (35 percent) stated the number of majors had stayed about the same, and 9 percent indicated the number had decreased.
- When evaluating four components of undergraduate education in sociology, department chairs assessed curriculum and faculty/staff resources more positively than they did the academic preparation and interest and motivation of students.
- The academic preparation of entering freshmen was ranked as the most important issue of concern to chairs of departments with sociology programs. Other issues ranked as major concerns were student interest and motivation, the computer background of students, recruiting and retention of qualified faculty, and appropriateness of class size for introductory courses.
- Only 37 percent of chairs of departments with sociology programs stated their department offered undergraduate sociology students access to departmental computers for undergraduate research and coursework. However, virtually all (95 percent) of the chairs stated that their students had access to campus-wide computer resources.
- In fall 1990, an estimated 16,990 undergraduate and 2,270 graduate sociology courses were offered by the 1,174 four-year colleges and universities with sociology programs. An average of 14.5 undergraduate and an average of 6.7 graduate courses in sociology were taught by institutions offering courses at those levels.

- An estimated 6,590 full-time and 2,470 part-time faculty taught sociology courses to undergraduates in fall 1990. This represented 93 percent of full-time and 97 percent of part-time instructional sociology staff.
- Of the full-time faculty teaching sociology to undergraduates, 38 percent were full professors, 32 percent were associate professors, 24 percent were assistant professors, and 5 percent were lecturers or instructors.
- In each department with a sociology program, there were an average (mean) of 5.6 full-time and 2.1 part-time faculty teaching sociology to undergraduates. The average full-time faculty included 2.1 full professors, 1.8 associate professors, and 1.4 assistant professors.
- Most (87 percent) full-time faculty teaching sociology to undergraduates held doctorate degrees, 12 percent had master's degrees, and less than half of 1 percent held bachelor's degrees as their highest degree.
- The full-time faculty members who taught sociology to undergraduates in fall 1990 were 84 percent white, non-Hispanic; 8 percent black, non-Hispanic; 4 percent Hispanic; 3 percent Asian; and 1 percent nonresident alien.
- An average (mean) of 82 percent of the instructional contact hours for undergraduate sociology was taught by full-time faculty. "Contact hours" includes lectures, laboratories, and discussion groups. The remaining 18 percent was provided by part-time faculty (15 percent), and teaching assistants and other faculty (3 percent).
- Only 22 percent of the chairs of departments with sociology programs stated that their departments had teaching assistants (TAs), and these departments were located mostly at research and doctoral institutions. Almost 90 percent of the chairs with teaching assistants stated that TAs in their department grade tests and papers and hold office hours; 70 percent and 54 percent, respectively, indicated that TAs lecture occasionally and conduct discussion groups.

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## Introduction

This survey of sociology programs at the Nation's colleges and universities represents one of the first efforts of the National Science Foundation (NSF) to gather information, nationally, on a number of topics in undergraduate science and engineering education. In the past, NSF has collected data on graduate education and has used, when necessary, existing data on undergraduate education collected by other Federal agencies and professional associations. However, in the last several years, NSF's budget for undergraduate education has increased substantially, and programs are being developed to improve proficiency for all students in science and mathematics. In order to develop new undergraduate education programs and evaluate existing ones, information on specific fields of science and engineering is needed.

This survey, and companion surveys of geology and physics, are the first in a series of Higher Education Surveys of selected science and engineering departments that will capture information on undergraduate science and engineering in the Nation's universities, four-year colleges, and two-year colleges.<sup>1</sup> The data developed in these surveys will provide current information to planners and policy makers in education, government, and industry.

This survey of undergraduate programs in sociology requested information on the organization of the department or program in which undergraduates take sociology courses; characteristics of the instructional faculty who teach undergraduate sociology courses; issues and concerns of the sociology department chair (or chair of the department housing the sociology program); type of sociology course offerings; and availability of computer resources to students enrolled in sociology. The general purpose of the survey of undergraduate sociology programs is two-fold. First, it provides baseline data on the characteristics of institutions, departments/programs, and faculty responsible for providing instruction to undergraduates in sociology. Secondly, it allows NSF to determine the quality of available data, and the feasibility of collecting data on undergraduate education, other than earned degrees, by discipline.

The data were collected in spring 1991 from department chairs at a nationally representative sample of 597 four-year colleges and universities, representing a universe of approximately 1,370 four-year institutions (specialized institutions were excluded from the sample). The sample consisted of 104 research, 106 doctoral, 150 comprehensive, and 180 liberal arts institutions, and 57 historically black colleges and universities (HBCUs) that are not part of the HES panel.<sup>2</sup> Screening of institutions found 68 to be out-of-scope because they did not have an undergraduate program in sociology. This resulted in an in-scope sample of 529 institutions. Questionnaires were not received from 9 institutions, and 18

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<sup>1</sup>Similar surveys were conducted of undergraduate programs in geology, physics, and sociology. In addition, surveys on undergraduate instruction in electrical, mechanical, and civil engineering have been completed. Findings from these surveys are available in separate reports. Also, a survey of technical education in two-year institutions is scheduled to be conducted in winter 1992-93.

<sup>2</sup>See Appendix B for a brief description of the different types of institutions.

institutions refused to participate in the survey. The overall response rate was 95 percent based on 502 responses from the 529 institutions that met the criteria for inclusion in the survey. Appendix B provides a more detailed discussion of the sample and survey methodology. The survey questionnaire is reproduced in Appendix C.

## Definition of Programs and Courses

One of the purposes of the survey was to determine how much undergraduate instruction in sociology was being offered in the Nation's four-year colleges and universities, and the characteristics of the faculty providing this instruction. To broaden the coverage of the survey to include institutions that did not have sociology departments but taught courses in sociology, a decision was made to survey "departments that offered programs in sociology" instead of sociology departments.<sup>3</sup> Thus, an important methodological issue in this study was defining the term "sociology programs," since institutions defined their programs differently. Pretest results showed that the potential respondents, department chairs, would know if they had an undergraduate program in sociology. However, after mailout, it was discovered that some respondents needed clarification on what constituted a sociology program, a sociology course, and a separate program in other disciplines.

The instruction at the top of the questionnaire directed it to the attention of "the Chair of the Department of Sociology, or the department that offers a program in sociology." This instruction was insufficient for two reasons. First, if the school did not have a department or degree with that name, the questionnaire sometimes was discarded as not applicable for the school. For example, respondents at institutions with departments called Social Sciences sometimes did not realize that they should complete the sociology questionnaire. Second, respondents did not know what was meant by "program." Most respondents seemed to interpret this to mean "major." Thus, some respondents at institutions that offered a number of courses in sociology but did not have a major in sociology discarded the questionnaire as not applicable to them. These different interpretations of the instructions made clarification of them necessary. Additional instructions were provided (post-mailout) that stated that an institution was considered to have a sociology program if it "offered a major or minor in sociology, or taught four or more sociology courses on a regular basis." Given that programs are defined in this manner, figures presented in this report should not be interpreted as being estimates of the number of sociology departments or the total number of faculty teaching sociology in the country. Instead, these figures represent the number of sociology programs in the country, some of which may not be located in sociology departments, and the faculty that teach sociology in these programs. Consequently, there are fewer sociology departments than there are programs because sociology programs may be housed in departments with names other than sociology (e.g., social sciences).

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<sup>3</sup>This decision was based on discussions with NSF and Westat staff, department chairs, and staff of professional associations.

Clarification was also provided to help respondents determine whether specific sociology courses taught by departments other than sociology should be included in the study. For example, respondents were not sure if Introduction to Social Sciences should be considered a sociology course. They were asked to consider the course content in deciding whether such courses should be considered as sociology courses.

To determine the organization of the department in which sociology programs were housed, chairs were asked if their department had a separate program for any discipline in addition to sociology (e.g., a separate program in anthropology or social work). During data collection, it became apparent that respondents were not sure what was meant by a "separate program." Some were listing subareas of the discipline (e.g., criminal justice, rural sociology) even if they did not offer a degree in those subareas, while others considered these subareas to be part of sociology. Chairs at some institutions where sociology was offered in a multidisciplinary department, such as a department of social sciences, were listing diverse disciplines such as history, political science, and psychology as "separate programs." Chairs at other institutions that listed a department name as "social sciences" indicated that they did not have any separate programs. Department chairs that called with questions were told that subareas of sociology should be considered to be part of sociology, not separate programs, and that diverse disciplines, such as psychology and history, should be separated from sociology when completing the questionnaire if at all possible. Results showed that between 77 and 80 percent (depending on the question) of the department chairs responded for sociology programs only, with the rest responding for sociology plus other programs.

Section V of the questionnaire asked department chairs to give the number of "different undergraduate and graduate sociology courses, as identified by course title or number" taught in their department. Respondents tended to differ in the way they counted laboratories and discussion groups that were affiliated with lecture courses. If a respondent called to ask how discussion groups and laboratories should be counted, they were told to include them as part of the lecture course. However, since this instruction was not explicitly put on the questionnaire, it is not known to what extent this was done by all respondents. Discussions with respondents and inspection of microfiche college catalogs indicated that course numbering for laboratories and discussion groups was handled differently from institution to institution. At some institutions, they were assigned the same course number as the lecture with which they are associated, and at some they were given a different course number than the lecture. Some respondents also said that a student could enroll in a laboratory if he/she was not enrolled in the lecture portion of the course, although students rarely, if ever, actually did this. Results, therefore, reflect the institutions' definitions of "course," which may or may not include laboratories, discussions, or both.

## Report Overview

Data in this report, unless otherwise specified, are presented as "total" figures, which represent all four-year colleges and universities grouped together, and by institutional control (public and private) and type (research, doctoral, comprehensive, and liberal arts). These classifications are defined in Appendix B (see page B-9). While the total numbers are the major focus in the text, additional information by control and type are presented in the tables and figures.

The estimates in this report are based on sample data that have been weighted to produce national estimates.<sup>4</sup> Because these estimates are subject to sampling variability, numbers in the tables, figures, and text have been rounded. Percentages and averages have been calculated on the actual estimates rather than the rounded values. Specific statements of comparison made in the text are significant at the 95 percent confidence level or better.

## Programs and Degrees

In spring 1991, an estimated 1,174 four-year colleges and universities had sociology departments or departments with programs in sociology.<sup>5</sup> The majority (54 percent) of sociology programs were located in departments that offered separate programs in other disciplines in addition to sociology. These separate programs were most frequently in social work and anthropology. Other disciplines listed frequently by department chairs as separate programs (in addition to sociology) were psychology, criminal justice, and political science.

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<sup>4</sup>Nonresponse adjustment weights were also calculated. Weights were calculated based on (1) the original sample stratum of the institution, (2) whether or not the institution was an historically black college or university, and (3) its response status, i.e., respondent, ineligible, or nonrespondent.

<sup>5</sup>All departments offering programs in sociology will be referred to as "departments with programs in sociology" or "sociology programs" for the remainder of the report.

## Characteristics of Institutions with Sociology Programs

In spring 1991, there were more undergraduate sociology programs located at private institutions than at public institutions; 60 percent of the 1,174 sociology programs (699 programs) offering undergraduate instruction were located at private institutions. By type of institution, 45 percent (534 programs) were located at comprehensive institutions, 38 percent (447 programs) were located at liberal arts colleges, and 8 percent were located at both doctoral and research institutions (95 and 98 programs, respectively). However, since higher education institutions in the United States are not evenly distributed by type and control, the percentage of institutions of various types and control varies. As shown in Table 1, most research (94 percent), doctoral (90 percent), and comprehensive institutions (90 percent) had sociology programs; more than three-quarters (79 percent) of liberal arts institutions had sociology programs. Almost all (96 percent) public institutions had sociology programs, compared to 80 percent of private institutions.

Table 1. Number of institutions, and number and percentage of institutions with sociology programs, by control and type of institution: United States

Institutional characteristic	Number of institutions <sup>1</sup>	Number of institutions with sociology programs <sup>2</sup>	Percentage of institutions with sociology programs
Total . . . . .	1,368	1,174	86%
Control			
Public . . . . .	495	475	96
Private. . . . .	873	699	80
Type			
Research. . . . .	104	98	94
Doctoral . . . . .	106	95	90
Comprehensive. . . . .	591	534	90
Liberal arts. . . . .	567	447	79

<sup>1</sup>Represents all research, doctoral, comprehensive, and liberal arts colleges and universities in the United States.

<sup>2</sup>An institution was considered to have a sociology program if it offered a major or minor in sociology, or taught four or more sociology courses on a regular basis.

SOURCE: Higher Education Survey, s. Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

## Level of Degrees

The vast majority of departments with sociology programs (90 percent) offered bachelor's degrees in sociology (Table 2). However, only 20 percent of these departments awarded master's degrees, 10 percent awarded doctorate degrees, and 5 percent awarded associate's degrees. Departments with sociology programs at public institutions were more likely to award degrees in sociology at every degree level except associate's degrees than were departments with sociology programs at private institutions. For example, at public institutions, 96 percent offered bachelor's degrees, 41 percent awarded master's degrees, and 17 percent conferred doctorates. In comparison, 87 percent of departments with sociology programs at private institutions offered bachelor's degrees, 7 percent awarded master's degrees, and 5 percent conferred doctorates.

The level of training in sociology available to students varied according to the type of institution at which the program was located. Students studying sociology at research universities had the opportunity to pursue training in sociology through to the doctorate in many of these institutions -- 92 percent of departments at research institutions offered master's degrees in sociology and 87 percent offered doctorates (Table 2). Advanced study in sociology was also available to a somewhat lesser extent in programs at doctoral institutions, where 66 percent of the sociology programs offered master's degrees and 26 percent offered doctorates. The pattern was different at comprehensive and liberal arts institutions; only 15 percent of the departments with sociology programs at comprehensive institutions offered master's degrees, and only 1 percent awarded doctorates. Similarly, at liberal arts colleges, only 1 percent of the sociology programs offered master's degrees, and none awarded doctorates in sociology.

Table 2. Percentage of departments with sociology programs conferring degrees at each level, by control and type of institution: United States

Level of sociology degrees	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Associate's . . . . .	5	4	5	1	2	4	7
Bachelor's . . . . .	90	96	87	99	98	94	83
Master's . . . . .	20	41	7	92	66	15	1
Doctorate. . . . .	10	17	5	87	26	1	0

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

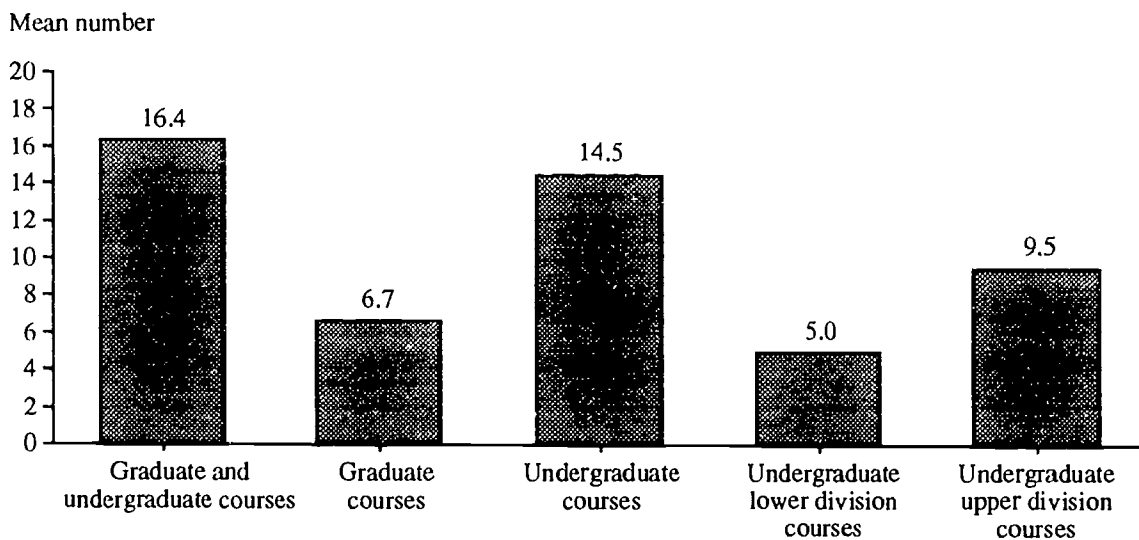


## Course Offerings

For fall 1990, chairs of departments with sociology programs reported that 19,260 graduate and undergraduate sociology courses were offered by the 1,174 four-year colleges and universities with undergraduate programs in sociology (Appendix Table A-1). Of these, 2,270 were graduate and 16,990 were undergraduate sociology courses. The 16,990 undergraduate sociology courses included 5,640 lower division and 10,710 upper division courses.

The average (mean) number of combined graduate and undergraduate sociology courses taught in departments with a program in sociology in fall 1990 was 16.4 (Figure 1). An average of 6.7 graduate and 14.5 undergraduate courses were taught in sociology programs by institutions offering courses at those levels. An average of 5.0 undergraduate lower division and 9.5 undergraduate upper division courses were offered by sociology programs.

Figure 1. Mean number of sociology courses taught in fall 1990, by course level: United States



NOTE: The mean number of total graduate and undergraduate sociology courses is smaller than the sum of the mean number of graduate courses plus the mean number of undergraduate courses. This is due to differences in the bases used to calculate the means. An institution is included in the base used to calculate total means if the institution offered either graduate or undergraduate courses; an institution is included in the base number used to calculate the mean number of graduate and mean number of undergraduate courses only if the institution offered these specific types of courses.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).



Slightly over half (55 percent) of the 19,260 sociology courses were offered at public institutions (Appendix Table A-1). An average of 22.3 sociology courses were offered by programs at public institutions, and an average of 12.4 courses were offered by departments at private institutions. By level of instruction, an average of 6.5 graduate sociology courses were taught by programs at public institutions that offered graduate sociology courses, and an average of 7.2 graduate sociology courses were taught at private institutions that offered graduate sociology courses. An average of 18.9 undergraduate sociology courses were offered by programs at public institutions, and an average of 11.5 were taught at private institutions. An average of 5.5 lower division and 13.4 upper division sociology courses were offered at public institutions. At private institutions, 4.7 lower and 6.7 upper division sociology courses were offered. The differences between public and private institutions are statistically significant for the average number of total sociology courses, undergraduate courses, and upper division courses.

The number of combined graduate and undergraduate sociology courses taught by programs at the different types of institutions ranged from 2,120 at doctoral institutions to 9,530 at comprehensive institutions. An average of 32.5 undergraduate and graduate sociology courses were taught by programs at research institutions, 22.3 at doctoral, 17.8 at comprehensive, and 9.9 at liberal arts institutions. The differences among these numbers are statistically significant.

## Instructional Staff

The survey collected two sets of counts of faculty providing instruction in sociology. First, it requested the total number of full-time and part-time faculty teaching sociology in fall 1990. Second, it asked for counts of faculty who taught sociology to undergraduates in fall 1990. Both sets of counts were requested by faculty rank for full-time faculty. Later questionnaire items solicited information only on the characteristics (i.e., highest degree, gender, and race/ethnicity) of faculty who taught sociology to undergraduates.

## Total Instructional Staff

In fall 1990 there were an estimated 9,600 faculty teaching graduate and undergraduate sociology courses in the Nation's four-year colleges and universities (Table 3). Of these, 74 percent (7,070) were full-time faculty. Of the full-time faculty, 39 percent were full professors, 31 percent were associate professors, 24 percent were assistant professors, and 5 percent were lecturers or instructors (Figure 2). About 62 percent of full-time faculty were teaching sociology at public institutions and the remaining 38 percent at private institutions. Figure 3 shows that 24 percent of full-time faculty were teaching sociology at research institutions, 13 percent at doctoral institutions, 46 percent at comprehensive institutions, and 17 percent at liberal arts colleges.

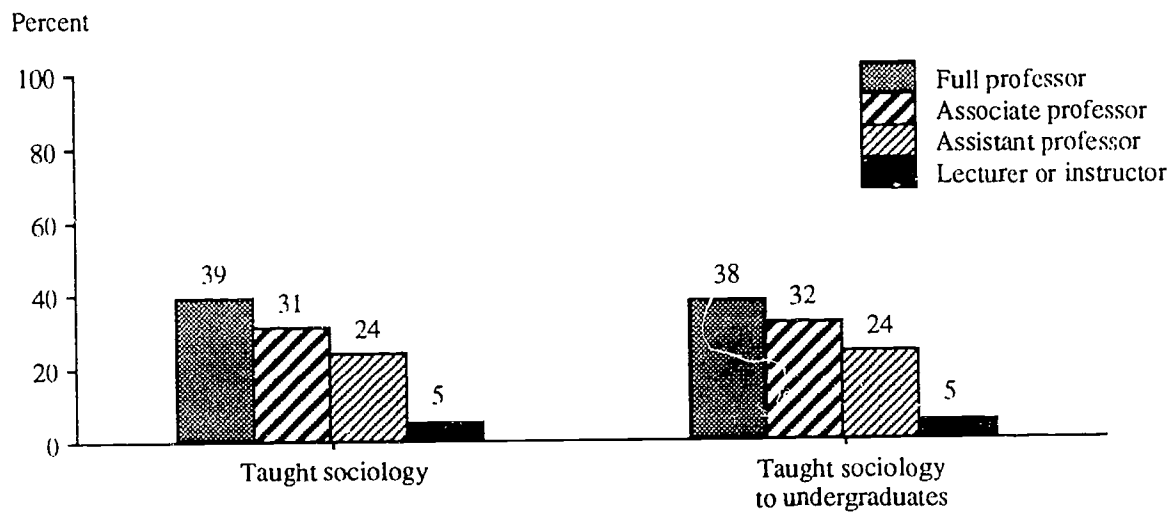
Table 3. Number of faculty, by faculty category, who taught sociology in fall 1990, by control and type of institution: United States

Faculty category	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Number of four-year colleges and universities with sociology departments . . .	1,174	475	699	98	95	534	447
Total faculty . . . . .	9,600	5,770	3,830	2,020	1,230	4,660	1,700
Total full-time faculty. . . . .	7,070	4,350	2,720	1,710	930	3,230	1,190
Full professor . . . . .	2,770	1,870	900	760	350	1,290	360
Associate professor. . . . .	2,220	1,340	880	520	320	990	390
Assistant professor. . . . .	1,680	900	780	350	220	760	350
Lecturer or instructor. . . . .	350	220	130	80	30	180	60
Total part-time faculty. . . . .	2,540	1,430	1,110	300	300	1,420	510

NOTE: The numbers of faculty have been rounded to the nearest 10. Details may not add to totals because of rounding. In addition, the total full-time faculty includes 40 unranked faculty members, who are not reported in the tables because that category contained so few responses.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

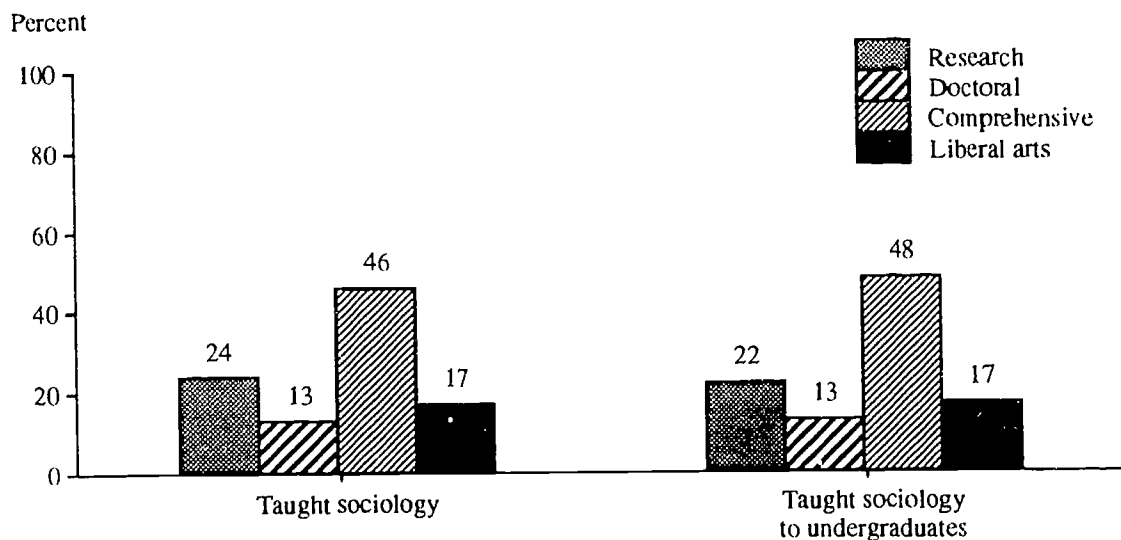
Figure 2. Percentage distribution of full-time faculty who taught sociology and those who taught sociology to undergraduates in fall 1990, by faculty rank: United States



NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

Figure 3. Percentage distribution of full-time faculty who taught sociology and those who taught sociology to undergraduates in fall 1990, by institutional type: United States



SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

The average (mean) number of faculty in each program teaching sociology was 6.0 full-time and 2.2 part-time faculty (Table 4). The full-time faculty members included, on average, 2.4 full professors, 1.9 associate professors, and 1.4 assistant professors. At public institutions, an average of 9.2 full-time faculty taught sociology; at private institutions, an average of 3.9 full-time faculty members taught sociology.

Sociology programs located at research institutions were considerably larger in terms of the mean number of full-time faculty teaching sociology than were departments at doctoral, comprehensive, and liberal arts institutions. There were an average of 17.5 full-time faculty teaching at research institutions, compared to an average of 9.8 at doctoral institutions, 6.1 at comprehensive institutions, and 2.7 at liberal arts colleges. At research, doctoral, and comprehensive institutions, the largest average number of full-time faculty teaching sociology were full professors.

Table 4. Mean number of faculty, by faculty category, who taught sociology in fall 1990, by control and type of institution: United States

Faculty category	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Number of four-year colleges and universities with sociology departments . . .	1,174	475	699	98	95	534	447
Total faculty . . . . .	8.2	12.2	5.5	20.6	13.0	8.7	3.8
Total full-time faculty. . . . .	6.0	9.2	3.9	17.5	9.8	6.1	2.7
Full professor . . . . .	2.4	3.9	1.3	7.8	3.7	2.4	0.8
Associate professor. . . . .	1.9	2.8	1.3	5.3	3.4	1.9	0.9
Assistant professor. . . . .	1.4	1.9	1.1	3.6	2.3	1.4	0.8
Lecturer or instructor. . . . .	0.3	0.5	0.2	0.8	0.4	0.3	0.1
Total part-time faculty. . . . .	2.2	3.0	1.6	3.1	3.2	2.7	1.1

NOTE: Details may not add to totals because of rounding.

SOURCE: Higher Education Surveys. Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991)

## Instructional Staff Teaching Undergraduates

There were an estimated 9,060 faculty teaching sociology to undergraduates in fall 1990, of which 73 percent (6,590) were full time and 27 percent (2,470) were part time (Table 5). Of the full-time faculty teaching undergraduates, 38 percent were full professors, 32 percent were associate professors, 24 percent were assistant professors, and 5 percent were lecturers or instructors (Figure 2). The majority (61 percent) of the full-time faculty teaching undergraduates were located in programs at public institutions; the remaining 39 percent were at private institutions. Figure 3 shows that 48 percent of the full-time faculty teaching sociology to undergraduates were located at comprehensive institutions, 22 percent were teaching at research universities, 17 percent were at liberal arts colleges, and 13 percent were at doctoral universities.

Table 5. Number of faculty, by faculty category, who taught sociology to undergraduates in fall 1990, by control and type of institution: United States

Faculty category	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Number of four-year colleges and universities with sociology departments . . .	1,174	475	699	98	95	534	447
Total faculty . . . . .	9,060	5,380	3,680	1,730	1,170	4,520	1,640
Total full-time faculty . . . . .	6,590	4,010	2,580	1,440	870	3,150	1,130
Full professor . . . . .	2,490	1,670	830	590	330	1,230	350
Associate professor . . . . .	2,100	1,260	840	450	300	980	370
Assistant professor . . . . .	1,610	860	750	320	210	750	330
Lecturer or instructor . . . . .	340	220	120	80	30	180	60
Total part-time faculty . . . . .	2,470	1,370	1,100	300	300	1,370	510

NOTE: The numbers of faculty have been rounded to the nearest 10. Details may not add to totals because of rounding. In addition, the total full-time faculty includes 40 unranked faculty members, who are not reported in the table because that category contained so few responses.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991)

The average (mean) number of faculty teaching sociology to undergraduates in fall 1990 was 5.6 full-time and 2.1 part-time faculty (Table 6). The full-time faculty included, on average, 2.1 full professors, 1.8 associate professors, and 1.4 assistant professors. At public institutions, an average of 8.5 full-time faculty taught sociology to undergraduates, and at private institutions, an average of 3.7 faculty taught sociology to undergraduates.

The average number of full-time faculty teaching sociology courses varied considerably by the type of institution at which the sociology program was located. In fall 1990, an average of 14.7 full-time faculty were teaching sociology to undergraduates at research universities, 9.1 at doctoral institutions, 5.9 at comprehensive institutions, and 2.5 at liberal arts colleges.

Table 6. Mean number of faculty, by faculty category, who taught sociology to undergraduates in fall 1990, by control and type of institution: United States

Faculty category	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Number of four-year colleges and universities with sociology departments . . .	1,174	475	699	98	95	534	447
Total faculty . . . . .	7.7	11.3	5.3	17.7	12.3	8.5	3.7
Total full-time faculty. . . . .	5.6	8.5	3.7	14.7	9.1	5.9	2.5
Full professor . . . . .	2.1	3.5	1.2	6.0	3.4	2.3	0.8
Associate professor. . . . .	1.8	2.6	1.2	4.6	3.1	1.8	0.8
Assistant professor. . . . .	1.4	1.8	1.1	3.2	2.2	1.4	0.7
Lecturer or instructor. . . . .	0.3	0.5	0.2	0.8	0.3	0.3	0.1
Total part-time faculty. . . . .	2.1	2.9	1.6	3.0	3.1	2.6	1.1

NOTE: Details may not add to totals because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

Most (93 percent) full-time faculty who taught sociology also taught sociology to undergraduates (Table 7). By faculty rank, the percentage ranged from 90 percent of full professors to 99 percent of lecturers or instructors. About 95 percent of full-time faculty at doctoral, comprehensive, and liberal arts institutions taught sociology to undergraduates; at research institutions, 84 percent taught undergraduates.

Table 7. Percentage of sociology faculty, by faculty category, who taught sociology to undergraduates in fall 1990, by control and type of institution: United States

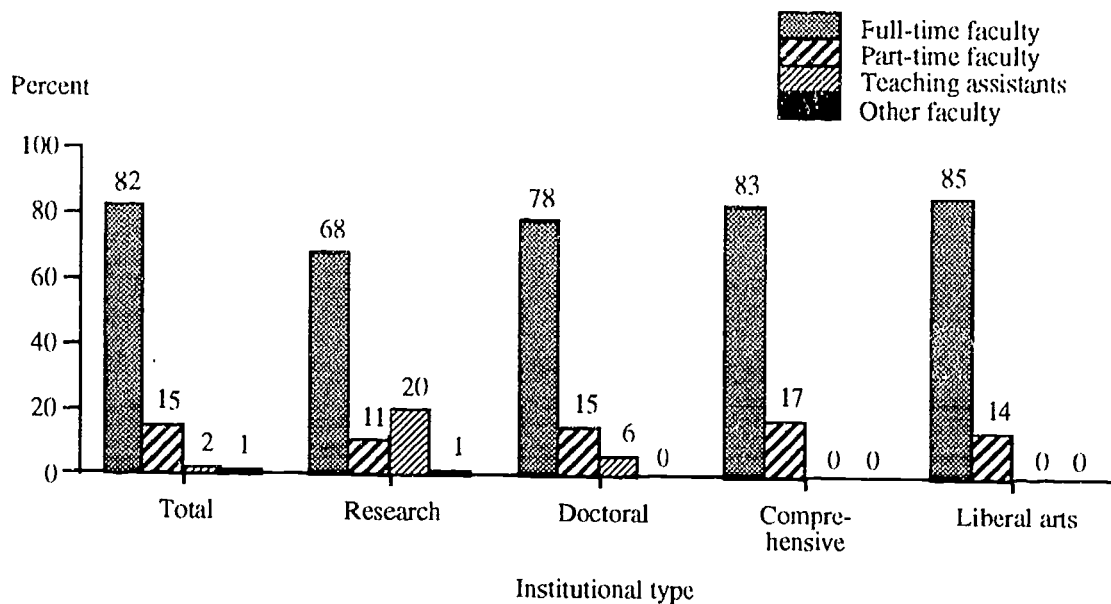
Faculty category	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Total full-time faculty . . .	93	92	95	84	94	97	95
Full professor . . . . .	90	89	92	77	92	95	96
Associate professor . . .	94	94	95	88	93	99	94
Assistant professor . . .	96	95	96	90	97	99	94
Lecturer or instructor . .	99	100	98	97	97	100	100
Total part-time faculty . . .	97	96	99	98	97	96	100

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

## Mean Instructional Contact Hours

For fall 1990, chairs of departments with sociology programs reported that an average of 82 percent of the contact hours for undergraduate instruction were taught by full-time faculty (Figure 4). "Contact hours" was defined to include lectures, laboratories, and discussion groups. The remaining 18 percent of instructional contact hours were provided by part-time faculty (15 percent), teaching assistants (2 percent), and "other faculty" (1 percent). There was variation by institutional type, which was influenced strongly by the presence of teaching assistants at the various types of institutions. Most (85 percent) of the instructional contact hours at liberal arts colleges were provided by full-time faculty, while at research universities, 68 percent of instructional contact hours were provided by full-time faculty. Teaching assistants did not provide any of the instructional contact hours at comprehensive and liberal arts institutions, while they provided 20 percent of the instructional contact hours at research institutions.

Figure 4. Mean percentage of undergraduate instructional contact hours in sociology programs in fall 1990 for various types of teaching staff, by institutional type: United States



NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).



## Highest Degree

The vast majority (87 percent) of full-time faculty teaching sociology to undergraduates had doctorates (Table 8). In addition, 12 percent held master's degrees as their highest degree; the percentages with bachelor's or other degrees as their highest degree were less than 0.5 percent. More full-time faculty at public institutions than private institutions had doctorates as their highest degree, while more full-time faculty at private than at public institutions had master's degrees as their highest degree. Full-time faculty at research and doctoral institutions were more likely than those at comprehensive institutions to have doctorates, and faculty at all of these types of institutions were more likely than those at liberal arts colleges to have doctorates. Conversely, full-time faculty at liberal arts colleges were the most likely to have master's degrees as their highest degree.

Part-time faculty teaching undergraduates tended to have master's degrees (62 percent) more often than doctorates (35 percent). There was considerable variation by institutional type, with over half (55 percent) of part-time faculty at research institutions holding doctorates, compared to only about one-third of part-time faculty at the other types of institutions.

Table 8. Percentage of full-time and part-time faculty, by highest degree, who taught sociology to undergraduates in fall 1990, by control and type of institution: United States

Highest degree	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
<b>Full-time faculty</b>							
Doctorate . . . . .	87	91	82	98	96	84	77
Master's . . . . .	12	9	17	2	4	15	21
Bachelor's . . . . .	*	*	1	*	*	*	2
Other . . . . .	*	*	*	0	*	*	*
<b>Part-time faculty</b>							
Doctorate . . . . .	35	36	34	55	33	33	30
Master's . . . . .	62	61	64	43	65	65	67
Bachelor's . . . . .	1	1	1	*	2	1	1
Other . . . . .	2	2	1	1	*	2	2

\* = less than 0.5 percent.

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

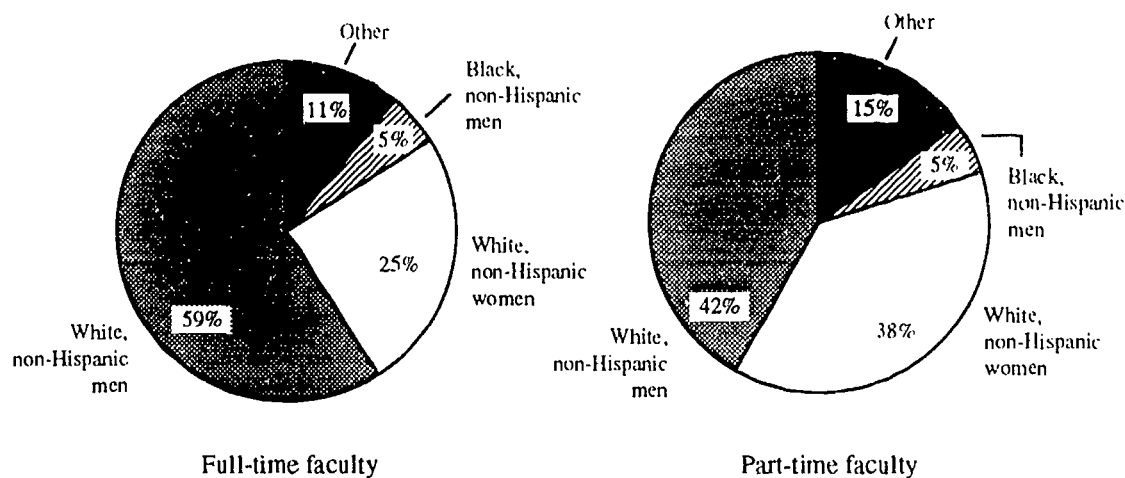
## Gender and Race/Ethnicity

The full-time faculty members who taught sociology to undergraduates in fall 1990 were 84 percent white, non-Hispanic (59 percent men and 25 percent women), 8 percent black, non-Hispanic (5 percent men and 3 percent women), 4 percent Hispanic (2 percent each for men and women), 3 percent Asian men, and 1 percent non-resident alien men (Appendix Table A-2 and Figure 5). The racial/ethnic and gender distributions of faculty were similar regardless of institutional control and type.

The gender distribution of part-time undergraduate sociology faculty differed from the distribution of full-time faculty, but racial/ethnic proportions were similar (Appendix Table A-3 and Figure 5). Eighty percent of part-time undergraduate faculty were white, non-Hispanic (compared to 84 percent for full-time faculty), but these faculty were almost evenly divided into men and women (42 percent and 38 percent, respectively). The remaining part-time faculty were 10 percent men and 10 percent women, and were distributed across all racial/ethnic groups except American Indians or Alaskan Natives.

When compared to national figures for all full-time faculty, black and Hispanic representation among undergraduate sociology faculty was slightly higher than among all faculty. National estimates of the

Figure 5. Percentage distribution of full-time and part-time faculty who taught sociology to undergraduates in fall 1990, by racial/ethnic group and gender: United States



NOTE: Percentages may not add to 100 because of rounding. Other full-time faculty includes 3 percent Asian or Pacific Islander men, 3 percent black, non-Hispanic women, 2 percent Hispanic men, 2 percent Hispanic women, and 1 percent nonresident alien men. Other part-time faculty includes 1 percent Asian or Pacific Islander men, 2 percent Asian or Pacific Islander women, 4 percent black, non-Hispanic women, 3 percent Hispanic women, 3 percent Hispanic men, 1 percent nonresident alien women, and 1 percent nonresident alien men.

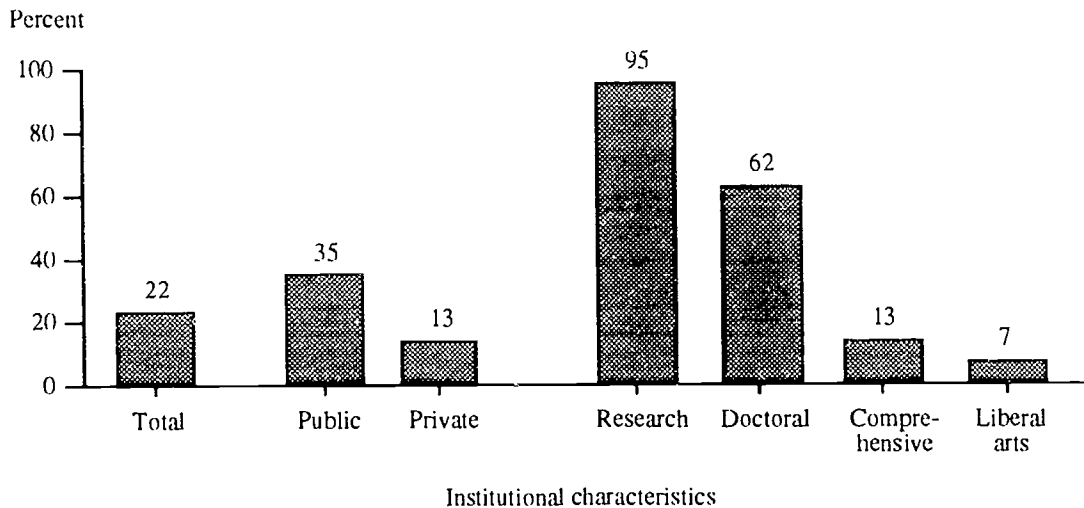
SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

race/ethnicity of all full-time faculty in the Nation's colleges and universities were 4 percent black and 2 percent Hispanic; for undergraduate sociology faculty, the estimates were 8 percent black and 4 percent Hispanic.<sup>6</sup>

## Teaching Assistants

Less than one-quarter (22 percent) of the programs in sociology had teaching assistants (TAs) in fall 1990 (Figure 6). The percentage of department chairs at public institutions (35 percent) who reported they were using TAs in their sociology program was more than double the percentage of department chairs at private institutions (13 percent) who reported using TAs. Chairs at almost all (95 percent) of the research institutions and chairs at 62 percent of the doctoral institutions indicated TAs are used in their sociology programs. In comparison, only 13 percent of department chairs at comprehensive institutions and 7 percent of those at liberal art colleges reported using TAs. The mean percentage of TAs who were graduate students was 75 percent (Figure 7). There was considerable variation by institutional type, ranging from no graduate student TAs at liberal arts institutions to 98 percent at research institutions; this variation is related to the availability of graduate students at those types of institutions (since by definition, liberal arts colleges are primarily undergraduate colleges, and, therefore, graduate students are much less likely to be available as TAs).

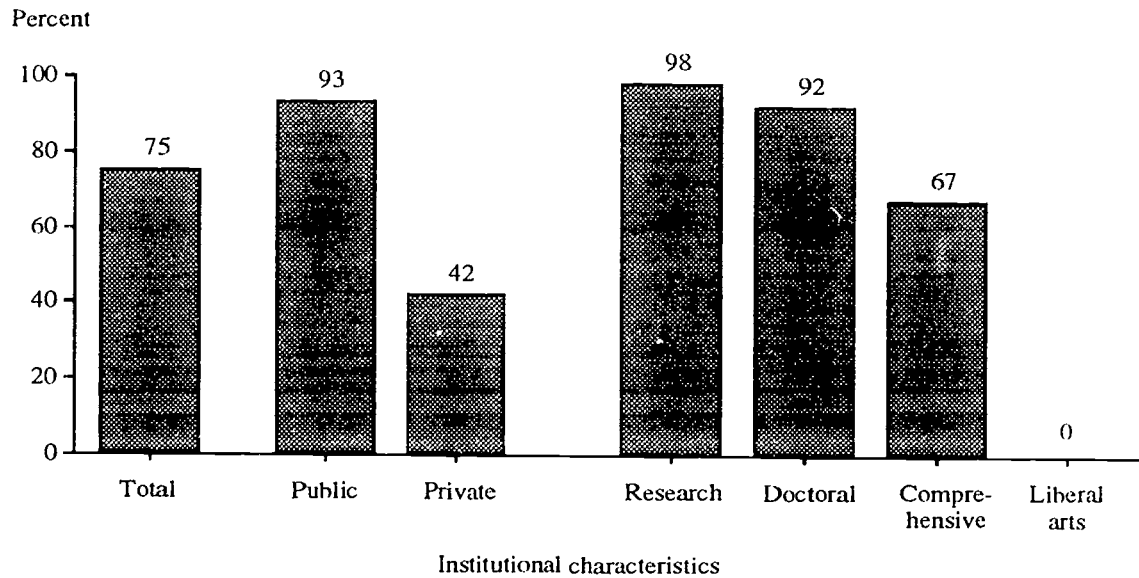
Figure 6. Percentage of departments with sociology programs that had teaching assistants in fall 1990, by control and type of institution: United States



SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

<sup>6</sup>The Chronicle of Higher Education Almanac; August 28, 1991, p.29.

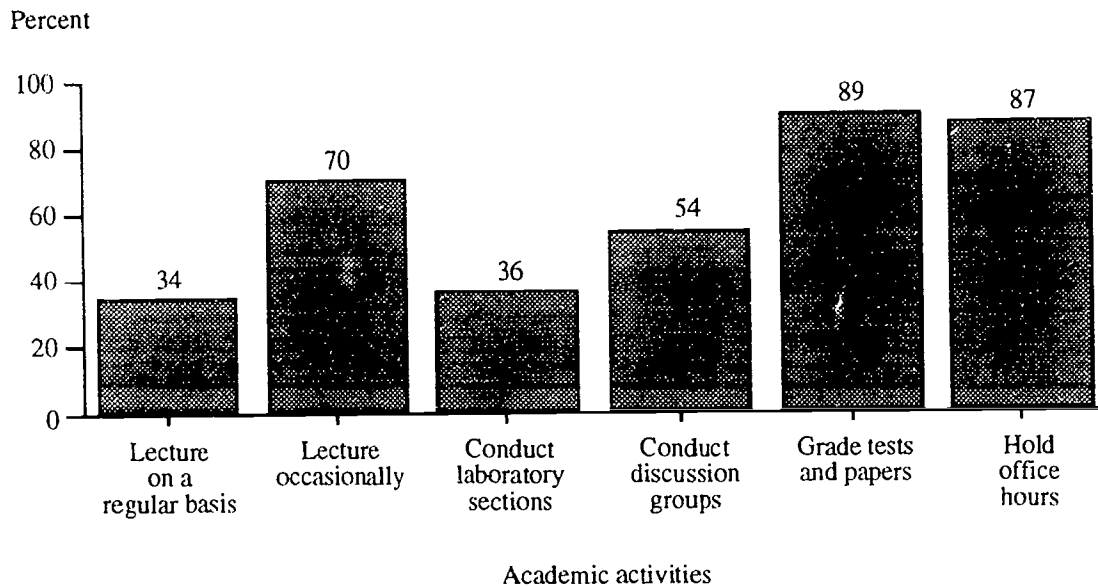
Figure 7. Percentage of sociology teaching assistants in fall 1990 who were graduate students, by institutional type: United States



SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

Teaching assistants performed a variety of academic activities in sociology programs (Figure 8). Almost all of the department chairs (89 percent) stated that TAs were used to grade papers, 87 percent indicated that TAs held office hours, and 70 percent said TAs lectured occasionally. TAs were used to a lesser extent to conduct discussion groups (54 percent), conduct laboratory sessions (36 percent), and lecture on a regular basis (34 percent). Teaching assistants averaged 1.4 laboratory sections or discussion groups for each term (unpublished tabulation).

Figure 8. Percentage of teaching assistants in departments with sociology programs who performed various kinds of academic activities: United States



SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

About half (53 percent) of the sociology programs that had TAs offered a course or seminar (at the institution or department level) to enhance the teaching and communication skills of teaching assistants (unpublished tabulation). The topics most frequently covered were teaching techniques and preparation of course material, covered by 95 percent and 93 percent, respectively, of the programs with a course or seminar for TAs. Department chairs at 64 percent of the programs with a course or seminar for TAs required all their teaching assistants to attend; 14 percent required only some teaching assistants to attend, and 22 percent did not require any teaching assistants to attend.

## Department Chairs' Perceptions

While the majority of the questionnaire items requested department chairs to provide actual figures, several items asked them to give their perceptions. Specifically, department chairs were asked to evaluate selected aspects of undergraduate education in sociology and computer resources available to undergraduate students, and to indicate whether they perceived changes in the number of students in their departments declaring a major in sociology. No effort was made to verify whether these perceptions matched information available in student, departmental, or institutional records. However,

these perceptual data provide valuable information and insights that can be explored more objectively in future studies.

## **Ratings of Issues and Concerns in Undergraduate Education**

Four components of undergraduate education in sociology were examined in this survey. Department chairs of sociology programs rated selected aspects of student preparation and motivation, curriculum, faculty and staff resources, and teaching assistants on a scale of very poor to very good. For the analysis reported here, the responses were collapsed into three categories, poor, average, and good (Appendix Table A-4).<sup>7</sup> There was substantial variability on most issues among chairs of sociology programs at different types of institutions.

More than three-quarters of the department chairs indicated that entering freshmen had average or poor academic preparation, and that students had average or poor computer background, and interest and motivation. About one-third of the chairs rated the academic preparation of entering freshmen as poor, 50 percent judged it to be average, and only 18 percent reported it to be good. Chairs at different types of institutions differed on this measure, however, with representatives of programs at research institutions (36 percent) more likely than those at doctoral (23 percent), comprehensive (12 percent), or liberal arts institutions (20 percent) to rate the academic preparation of their freshmen as good. Evaluation of the computer background of students was even more negative. Students in 60 percent of the programs were judged to have a poor background in computers; 33 percent were reported to have an average background, and only 7 percent, a good background. The interest and motivation of sociology students received a somewhat better but still low rating; 42 percent of the chairs judged it to be good, 44 percent average, and 15 percent rated it poor. There were differences among department chairs at different types of institutions on these measures as well. Chairs of sociology programs at research institutions evaluated their students more highly on computer background and interest and motivation than did chairs at comprehensive and doctoral institutions. Twelve percent of chairs at research institutions rated the computer background of sociology students as good versus 8 percent at doctoral institutions and 3 percent at comprehensive institutions. Forty-nine percent of chairs at research institutions rated the interest and motivation of their students as good, but only 38 percent of the chairs at comprehensive and doctoral institutions did so.

In the area of curriculum, a substantial majority of chairs of departments with sociology programs rated both introductory and advanced textbooks highly. Only 4 percent of department chairs indicated that introductory textbooks were not applicable for their department; 4 percent also indicated that advanced textbooks were not applicable for their department. Of the remaining chairs, 72 percent rated their introductory textbooks as good, and 79 percent

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<sup>7</sup>As shown in item 4 on the questionnaire in Appendix C, each category included more than one item. Respondents were asked to rate each item on a 5-point scale from very poor to very good. The analysis reported here is based on that scale collapsed into 3 categories, *poor*, *average*, and *good*.

rated their advanced textbooks as good. The opportunity for undergraduate research, however, was judged less favorably, with only 56 percent reporting good opportunity for their students to engage in undergraduate research through independent study or advanced coursework. Respondents at comprehensive (74 percent) and liberal arts (74 percent) institutions were more likely than respondents at doctoral (66 percent) and research (59 percent) institutions to evaluate their introductory texts highly, and chairs at liberal arts colleges (79 percent) were also more likely than those at research universities (73 percent) to rate advanced texts as good. The pattern differs with regard to the opportunity for undergraduate students to conduct research. Chairs at research (64 percent) and doctoral (71 percent) institutions were more likely than those at comprehensive (55 percent) or liberal arts (51 percent) institutions to judge their students as having a good opportunity for undergraduate research through independent study or advanced coursework.

The majority of department chairs gave faculty and staff resources good ratings. Fifty-six percent rated class size for introductory courses as good, and 71 percent cited class size for advanced courses as good. Faculty received comparable ratings with 57 percent of the programs reporting good recruiting and retention of qualified faculty, and 71 percent judging the language ability of faculty members whose first language is not English to be good. There was significant variability among chairs at different types of institutions on all but the last measure. More chairs at liberal arts institutions (76 percent) gave a good rating to the size of their introductory classes than did chairs at comprehensive (47 percent), doctoral (35 percent), or research (32 percent) institutions. Chairs at liberal arts colleges (84 percent) were also more likely to rate the size of advanced classes as good than chairs at any other category of institution, and chairs at doctoral (72 percent) and comprehensive (63 percent) institutions were also more likely than those at research (54 percent) institutions to give a good rating to the sizes of their advanced classes. However, chairs at research (66 percent) and doctoral (69 percent) institutions judged their ability to recruit and retain qualified faculty to be good more than did chairs at comprehensive (53 percent) or liberal arts (57 percent) institutions.

Teaching assistants were not always used in sociology programs; 78 percent of the programs surveyed did not have teaching assistants in the fall of 1990. The presence of teaching assistants varied by institutional type. For example, 95 percent of the programs at research institutions and 62 percent of the programs at doctoral institutions had teaching assistants in the fall of 1990, but only 13 percent of programs at comprehensive institutions and 7 percent of those at liberal arts institutions did. For those programs where the department chairs did complete the ratings for teaching assistants, the availability of teaching assistants was rated good by 35 percent, and the quality of teaching assistants was rated good by over 60 percent. The language ability of the teaching assistants whose first language is not English was judged to be good by 43 percent of the sociology chairs, and those at doctoral institutions (52 percent) were more likely than those at research institutions (38 percent) to do so.



## **Greatest Problems for Undergraduate Education**

After rating the aspects of undergraduate education in sociology, respondents were asked to rank the five most critical problems for undergraduate education in sociology according to their severity. The academic preparation of entering freshmen emerged as the largest concern. About one-quarter of the department chairs cited it as their greatest problem (not shown in tables), and 46 percent ranked it as one of the three most critical problems for undergraduate education in sociology (Figure 9). Other student attributes were named as serious problems, as well. Student interest and motivation was ranked first by 10 percent of the respondents, and it ranked in the top three by nearly one-third of the department chairs. The computer background of students was named as the most serious problem by 8 percent and as one of the three most serious problem by 25 percent of the department chairs in sociology programs. Other major issues for sociology programs were recruiting and retention of qualified faculty (ranked first by 9 percent of respondents), class size for introductory courses (ranked first by 7 percent), and opportunity for undergraduate research through independent study or advanced coursework (ranked as one of the three most serious problems by chairs at 16 percent of the programs).

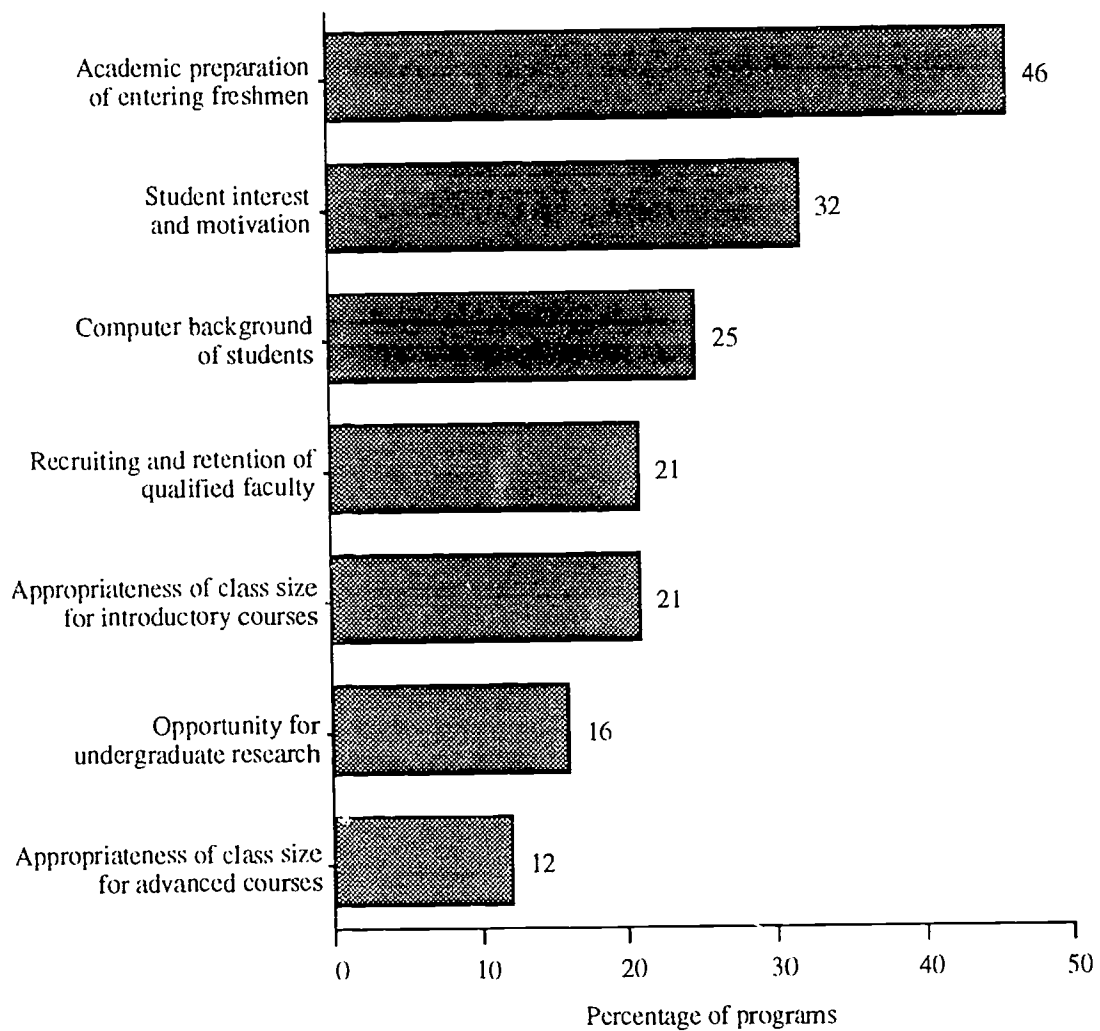
## **Departmental Computer Resources**

Thirty-seven percent of department chairs indicated that their sociology programs offered their undergraduate students access to departmental computers for undergraduate research and coursework. Chairs of departments with the programs that provided computer access for their students were asked to rate their computer resources on a five-point scale ranging from very poor to very good, and the scale was collapsed into three categories (poor, average, and good) for this analysis (Appendix Table A-5).

Most aspects of departmental computer resources available for undergraduates received a good rating from half or less of the department chairs. The exception was the evaluation of the quality of departmental computer equipment, which was rated good by 59 percent of the chairs. Only 34 percent gave the same rating to the amount of departmental computer equipment available for undergraduate sociology students, and 42 percent reported that the amount of equipment was poor. About 30 percent of the respondents rated the quality of computer space and the amount of computer space as good, and nearly half judged each of those computer resources to be poor. Chairs at both doctoral institutions (43 percent) and research institutions (38 percent) rated the quality of computer space more highly than did those at comprehensive institutions (27 percent). And chairs at doctoral institutions (43 percent) were more likely than those at research (23 percent) and comprehensive institutions (26 percent) to evaluate the amount of departmental computer space available to their undergraduates as good. Ratings for the quality of departmental software were more positive, with about half of the chairs judging both instructional and research software as good, and only about one-quarter of the chairs judging each type of software as poor.



Figure 9. Aspects of undergraduate education in sociology ranked as the top three greatest problems by 10 percent or more of chairs of departments with sociology programs: United States



SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15). National Science Foundation, 1992 (survey conducted in 1991).

## Campus-wide Computer Resources

Ninety-five percent of the chairs reported that their students have access to campus-wide computer resources for undergraduate research and coursework (Appendix Table A-6). Campus computer equipment and space received slightly more positive evaluations than did departmental computer equipment and space. For example, 65 percent of the respondents gave the quality of campus computer equipment to which their students had access a good rating, and 40 percent rated the amount of equipment as good. Forty-four percent rated the quality of computer space as good, and 38 percent indicated that the amount of computer space was good. There was some variability by type of institution on the ratings that chairs gave for amount and quality of equipment and quality of space. In general, respondents at doctoral institutions were more likely than those at other types of institutions to rate those aspects of computer resources for undergraduates as good. About 40 percent of the department chairs gave a rating of good to the quality of campus software used for instruction and to the quality of campus software used for research. Twenty-eight percent of the chairs rated instructional software as poor, while 35 percent gave a rating of poor to the software available to sociology students through campus computers for undergraduate research.

## Sociology Majors

Chairs of departments with programs in sociology were asked to indicate whether they perceived the number of students who declared a major in sociology to have increased, stayed about the same, or decreased over the last five years. Over half of the respondents (56 percent) indicated that the number of majors had increased, 35 percent said the number had stayed about the same, and 9 percent indicated that the number had decreased (Table 9).

Table 9. Percentage of chairs of departments with sociology programs indicating that the number of students who declared a major in sociology over the last 5 years has increased, stayed about the same, or decreased, by control and type of institution: United States

Change in number of majors	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Increased . . . . .	56	68	47	76	75	54	50
Stayed about the same. . . . .	35	25	42	19	20	36	41
Decreased . . . . .	9	7	10	4	4	11	9

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15). National Science Foundation, 1992 (survey conducted in 1991).

While the number of majors were perceived to have either increased or remained stable by approximately 90 percent of department chairs at both public and private institutions, respondents at public institutions were more likely than those at private institutions to say that the number of majors had increased during this time period. For example, 68 percent of the chairs at public institutions perceived an increase in the number of majors, while 47 percent of those at private institutions perceived such an increase.

The number of sociology majors was more likely to have been perceived as increasing at research and doctoral universities than at comprehensive and liberal arts institutions (Table 9). About three-quarters of the respondents at both research and doctoral institutions stated that the number of majors had increased over the last five years, while only about half of the department chairs at comprehensive and liberal arts institutions gave this same response.

# **APPENDIX A**

## **Detailed Tables**

## Detailed Tables

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Table A-1. Total number and mean number of sociology courses taught in fall 1990, by control and type of institution: United States

Number of sociology courses	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Number of four-year colleges and universities with sociology departments . . . . .							
	1,174	475	699	98	95	534	447
Total graduate and undergraduate sociology courses							
Total number . . . . .	19,260	10,600	8,660	3,190	2,120	9,530	4,420
Mean number . . . . .	16.4	22.3	12.4	32.5	22.3	17.8	9.9
Total graduate sociology courses							
Total number . . . . .	2,270	1,650	620	950	440	720	160
Mean number* . . . . .	6.7	6.5	7.2	10.2	6.8	4.4	9.4
Total undergraduate sociology courses							
Total number . . . . .	16,990	8,960	8,040	2,240	1,680	8,810	4,270
Mean number . . . . .	14.5	18.9	11.5	22.8	17.7	16.5	9.6
Lower division sociology courses							
Total number . . . . .	5,640	2,550	3,080	740	510	2,620	1,770
Mean number . . . . .	5.0	5.5	6.7	7.9	5.6	5.0	4.2
Upper division sociology courses							
Total number . . . . .	10,710	6,250	4,460	1,400	1,110	6,040	2,160
Mean number . . . . .	9.5	13.4	6.7	15.0	12.3	11.5	5.1

\*Based on programs that offered graduate sociology courses.

NOTE: The mean number of total graduate and undergraduate sociology courses is smaller than the sum of the mean number of graduate courses plus the mean number of undergraduate courses. This is due to differences in the bases used to calculate the means. An institution is included in the base used to calculate total means if the institution offered either graduate or undergraduate courses; an institution is included in the base number used to calculate the mean number of graduate and mean number of undergraduate courses only if the institution offered these specific types of courses. The total number of courses have been rounded to the nearest 10. Details may not add to totals because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

Table A-2. Percentage of full-time faculty, by racial/ethnic group and gender, who taught sociology to undergraduates in fall 1990, by control and type of institution: United States

Racial/ethnic group and gender	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Total number of full-time faculty who taught sociology to undergraduates in fall 1990, . . . . .							
	6,590	4,010	2,580	1,440	870	3,150	1,130
Nonresident aliens							
Men, . . . . .	1	1	1	1	1	1	*
Women . . . . .	*	*	*	*	1	*	1
U.S. citizens and permanent residents							
Black, non-Hispanic							
Men, . . . . .	5	5	4	4	4	6	3
Women . . . . .	3	3	3	2	2	4	3
White, non-Hispanic							
Men, . . . . .	59	61	56	65	66	55	57
Women . . . . .	25	23	28	23	21	25	31
Hispanic							
Men, . . . . .	2	2	2	2	2	2	1
Women . . . . .	2	1	3	1	1	3	1
Asian or Pacific Islander							
Men, . . . . .	3	3	2	1	2	4	2
Women . . . . .	*	1	*	*	*	*	*
American Indian or Alaskan Native							
Men, . . . . .	*	*	*	*	*	*	0
Women . . . . .	*	*	*	*	0	*	*

\* = less than 0.5 percent.

NOTE: The numbers of faculty have been rounded to the nearest 10. Details may not add to totals because of rounding. Percentages may not add to 100 because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

Table A-3. Percentage of part-time faculty, by racial/ethnic group and gender, who taught sociology to undergraduates in fall 1990, by control and type of institution: United States

Racial/ethnic group and gender	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Total number of part-time faculty who taught sociology to undergraduates in fall 1990. . . . .							
	2,470	1,370	1,100	300	300	1,370	510
Nonresident aliens							
Men. . . . .	1	1	1	3	1	1	1
Women . . . . .	1	1	1	1	*	1	2
U.S. citizens and permanent residents							
Black, non-Hispanic							
Men. . . . .	5	4	6	3	4	4	6
Women . . . . .	4	4	4	2	4	4	7
White, non-Hispanic							
Men. . . . .	42	41	43	42	43	41	45
Women . . . . .	38	40	36	40	43	37	37
Hispanic							
Men. . . . .	3	2	5	2	2	5	*
Women . . . . .	3	2	3	1	0	4	0
Asian or Pacific Islander							
Men. . . . .	1	2	1	2	1	2	0
Women . . . . .	2	3	1	2	2	2	*
American Indian or Alaskan Native							
Men. . . . .	*	*	0	0	*	*	0
Women . . . . .	*	*	0	0	1	0	1

\* = less than 0.5 percent.

NOTE: The numbers of faculty have been rounded to the nearest 10. Details may not add to totals because of rounding. Percentages may not add to 100 because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).



Table A-4. Percentage of chairs of departments with sociology programs who rated various aspects of undergraduate education in their department as poor, average, or good, by type of institution: United States

Aspect of undergraduate education	Total	Type			
		Research	Doctoral	Comprehensive	Liberal arts
<b>Academic preparation of entering freshmen</b>					
Poor . . . . .	32	20	25	39	27
Average . . . . .	50	45	52	49	52
Good . . . . .	18	36	23	12	20
<b>Student interest and motivation</b>					
Poor . . . . .	15	9	9	20	12
Average . . . . .	44	42	53	43	43
Good . . . . .	42	49	38	38	45
<b>Computer background of students</b>					
Poor . . . . .	60	56	52	65	58
Average . . . . .	33	32	40	31	33
Good . . . . .	7	12	8	3	9
<b>Quality of introductory textbooks</b>					
Poor . . . . .	6	9	8	6	6
Average . . . . .	22	32	26	20	20
Good . . . . .	72	59	66	74	74
<b>Quality of advanced textbooks</b>					
Poor . . . . .	2	2	6	0	3
Average . . . . .	20	25	20	20	19
Good . . . . .	79	73	74	80	79
<b>Opportunity for undergraduate research through independent study or advanced coursework</b>					
Poor . . . . .	19	14	12	17	23
Average . . . . .	26	22	16	27	26
Good . . . . .	56	64	71	55	51
<b>Appropriateness of class size for introductory courses</b>					
Poor . . . . .	23	40	45	28	8
Average . . . . .	21	29	20	25	16
Good . . . . .	56	32	35	47	76

Table A-4. Percentage of chairs of departments with sociology programs who rated various aspects of undergraduate education in their department as poor, average, or good, by type of institution: United States (continued)

Aspect of undergraduate education	Total	Type			
		Research	Doctoral	Comprehensive	Liberal arts
Appropriateness of class size for advanced courses					
Poor . . . . .	12	32	13	14	4
Average . . . . .	17	14	15	23	11
Good . . . . .	71	54	72	63	84
Recruiting and retention of qualified faculty					
Poor . . . . .	16	12	19	14	18
Average . . . . .	27	22	12	33	25
Good . . . . .	57	66	69	53	57
Language abilities of faculty members whose first language is not English					
Poor . . . . .	12	12	9	11	14
Average . . . . .	17	16	11	19	17
Good . . . . .	71	72	81	70	68
Availability of teaching assistants					
Poor . . . . .	43	19	28	66	35
Average . . . . .	22	27	30	21	6
Good . . . . .	35	54	43	13	59
Quality of teaching assistants					
Poor . . . . .	7	7	7	6	10
Average . . . . .	31	28	36	38	13
Good . . . . .	62	66	57	56	76
Language abilities of teaching assistants whose first language is not English					
Poor . . . . .	24	26	26	17	*
Average . . . . .	33	36	23	35	*
Good . . . . .	43	38	52	48	*

\*All respondents at liberal arts institutions indicated that this item was not applicable to them, because they did not have any teaching assistants whose first language is not English.

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15). National Science Foundation, 1992 (survey conducted in 1991).

Table A-5. Percentage of departments with sociology programs that have computer equipment located within the department to which undergraduates have access, and the percentage of department chairs rating these departmental computer resources as poor, average, or good, by type of institution: United States

Departmental computer resources	Total	Type			
		Research	Doctoral	Comprehensive	Liberal arts
Have computer equipment in department . . . . .	37	57	48	43	24
Quality of computer equipment					
Poor . . . . .	17	8	9	21	17
Average . . . . .	24	23	16	24	26
Good . . . . .	59	70	75	55	57
Amount of computer equipment					
Poor . . . . .	42	41	30	39	54
Average . . . . .	24	23	32	25	18
Good . . . . .	34	36	39	35	28
Quality of space for computer use					
Poor . . . . .	43	30	34	52	35
Average . . . . .	26	32	23	21	32
Good . . . . .	31	38	43	27	33
Amount of space for computer use					
Poor . . . . .	48	42	34	55	42
Average . . . . .	25	36	23	19	32
Good . . . . .	27	23	43	26	26
Quality of software for undergraduate instruction					
Poor . . . . .	27	21	12	35	19
Average . . . . .	25	34	35	21	24
Good . . . . .	48	45	53	43	56
Quality of software for undergraduate research					
Poor . . . . .	27	15	14	37	18
Average . . . . .	23	30	25	23	19
Good . . . . .	50	55	61	40	64

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation. 1992 (survey conducted in 1991).

Table A-6. Percentage of departments with sociology programs that have campus-wide computer equipment to which undergraduates have access, and the percentage of department chairs rating these campus-wide computer resources as poor, average, or good, by type of institution: United States

Campus-wide computer resources	Total	Type			
		Research	Doctoral	Comprehensive	Liberal arts
Have campus-wide computer equipment . . . . .	95	97	100	94	96
Quality of computer equipment					
Poor . . . . .	9	10	5	6	12
Average . . . . .	27	19	19	30	25
Good . . . . .	65	71	75	63	63
Amount of computer equipment					
Poor . . . . .	25	29	19	25	24
Average . . . . .	35	23	31	38	36
Good . . . . .	40	48	50	37	40
Quality of space for computer use					
Poor . . . . .	22	30	16	26	17
Average . . . . .	34	31	34	34	36
Good . . . . .	44	38	50	40	47
Amount of space for computer use					
Poor . . . . .	26	36	22	29	22
Average . . . . .	35	24	40	35	36
Good . . . . .	38	40	38	36	42
Quality of software for undergraduate instruction					
Poor . . . . .	28	24	23	29	30
Average . . . . .	31	32	37	28	33
Good . . . . .	40	44	40	43	37
Quality of software for undergraduate research					
Poor . . . . .	35	27	26	37	36
Average . . . . .	27	28	28	28	26
Good . . . . .	38	45	46	35	38

NOTE: Percentages may not add to 100 because of rounding.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

# **APPENDIX B**

## **Technical Notes**

## Higher Education Surveys

The Higher Education Surveys (HES) system was established to conduct brief surveys of higher education institutions on topics of interest to Federal policy makers and the education community. The system is sponsored by the National Science Foundation, the U.S. Department of Education, and the National Endowment for the Humanities.

HES questionnaires typically request a limited amount of readily accessible data from a subsample of institutions in the HES panel, which is a nationally representative sample of 1,134 colleges and universities in the United States. Each institution in the panel has identified a HES campus representative, who serves as survey coordinator. The campus representative facilitates data collection by identifying the appropriate respondent for each survey and distributing the questionnaire to that person.

## Survey Methodology

This mail survey was conducted at the request of the National Science Foundation (NSF) to provide information about instructional staff, computer resources, course offerings, and issues and concerns of departments teaching undergraduates.

The sample for this survey consisted of all the research (n=104), doctoral (n=106), and liberal arts institutions (n=180), and half of the comprehensive institutions (n=150) in the HES panel (n=540), and 57 historically black colleges and universities (HBCUs) that are not part of the HES panel. A packet containing questionnaires for geology, physics, and sociology programs, plus a cover letter, respondent designation form, and information copy of the questionnaire were sent to HES coordinators at these 597 institutions on February 27, 1991.\* At the HBCUs, personalized letters were sent to the president of the institution, in lieu of a HES coordinator. The letter requested the institution's participation and asked that the coordinator pass the questionnaires along to the chairs of the geology, physics, and sociology departments, or the departments that offer undergraduate programs in geology, physics, and sociology. The coordinator was asked to return the respondent designation form, indicating to whom the questionnaires were sent. Telephone followup with coordinators who had not returned their respondent designation forms began on March 18; telephone followup calls for questionnaire nonresponse began on March 25. Data collection was completed on June 7, 1991.

An overall response rate of 95 percent was obtained for each discipline. However, as shown in Appendix Table B-1, the number of institutions that offered programs in each discipline varied widely. Of the 597 institutions to which questionnaires were sent, 275 offered geology programs, 475 offered physics programs, and 529 offered sociology programs. Of these eligible programs, completed questionnaires were received from 262 geology programs, 450 physics programs, and 502 sociology programs. Response rates by

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\*Findings from the surveys of geology and physics are available in separate reports.

Table B-1. Unweighted response rates for the geology, physics, and sociology questionnaires by institutional type

Discipline and institutional type	Complete	Nonresponse	Refusal	Ineligible*	Total
<b>Geology</b>					
Total . . . . .	262	4	9	322	597
Research. . . . .	92	1	3	8	104
Doctorate . . . . .	70	1	1	34	106
Comprehensive. . . . .	70	1	5	74	150
Liberal arts. . . . .	28	1	0	151	180
Historically black colleges and universities. . . . .	2	0	0	55	57
<b>Physics</b>					
Total . . . . .	450	6	19	122	597
Research. . . . .	97	1	4	2	104
Doctorate . . . . .	90	0	5	11	106
Comprehensive. . . . .	124	1	7	18	150
Liberal arts. . . . .	103	3	2	72	180
Historically black colleges and universities. . . . .	36	1	1	19	57
<b>Sociology</b>					
Total . . . . .	502	9	18	68	597
Research. . . . .	94	1	3	6	104
Doctorate . . . . .	91	1	2	12	106
Comprehensive. . . . .	135	1	4	10	150
Liberal arts. . . . .	134	5	6	35	180
Historically black colleges and universities. . . . .	48	1	3	5	57

\*An institution was counted as ineligible for a particular discipline if the institution did not have an undergraduate program in that discipline.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

type of institution ranged from 92 to 100 percent. Data were adjusted for questionnaire nonresponse and weighted to national totals using the following procedures. A separate base weight was calculated for each of the adjustment classes, which were formed based on the stratum to which the school was assigned for sampling, and whether or not the school was an historically black college or university. The base weights for the adjustment classes were based upon the probability of selection of the sampled institutions within each adjustment class. Nonresponse weights were also calculated for each adjustment class, based on the ratio of the sum of the number of

responses and the number of refusals to the number of responses. The final weight was the product of the base weight and the nonresponse weight. Appendix Table B-2 shows the universe size (i.e., weighted number of institutions), the unweighted number of eligible institutions, and the unweighted number of responding institutions by institutional characteristics for each discipline. Historically black colleges and universities (HBCUs) were placed in their appropriate institutional control and type for analyses. HBCUs met the criteria for inclusion in both institutional control categories (i.e., public and private), and all institutional type categories (i.e., research, doctoral, comprehensive, and liberal arts).

The item response rate was 99 percent or higher for most items on the questionnaire. The only item receiving a response rate lower than 99 percent was the question about the number of laboratory sections or discussion groups a teaching assistant usually led in a semester, which had a response rate of 98 percent. Thus, item nonresponse was minimal, and statistics presented in this report may be interpreted as representing all sociology programs as defined in this survey.

## Reliability of Survey Estimates

The findings presented in this report are estimates based on the sample from the HES panel and, consequently, are subject to sampling variability. If the questionnaire had been sent to a different sample, the responses would not have been identical; some figures might have been higher, while others might have been lower. The standard error is a measure of the variability due to sampling when estimating a statistic. It indicates how much variability there is in the population of possible estimates of a parameter for a given sample size. Standard errors can be used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated percentage of sociology programs at public institutions rating the academic preparation of entering freshmen as poor is 43.1 percent and the estimated standard error is 3.1. The 95 percent confidence interval for this statistic extends from  $43.1 - (3.1 \text{ times } 1.96)$  to  $43.1 + (3.1 \text{ times } 1.96)$ , or from 37.0 to 49.2 percent. This means one can be 95 percent confident that this interval contains the true population value. Estimates of standard errors for the estimates were computed using a replication technique known as jackknife replication. Some key statistics and their estimated standard errors are shown in Appendix Table B-3.



Table B-2. Universe size, unweighted number of eligible institutions, and unweighted number of responding institutions by institutional characteristics for each discipline

Discipline and institutional characteristic	Universe*	Unweighted	
		Eligible	Respondents
<b>Geology</b>			
Total . . . . .	489	275	262
Control			
Public . . . . .	334	197	188
Private . . . . .	155	78	74
Type			
Research . . . . .	96	96	92
Doctorate . . . . .	72	74	70
Comprehensive . . . . .	237	76	72
Liberal arts . . . . .	85	29	28
<b>Physics</b>			
Total . . . . .	1,024	475	450
Control			
Public . . . . .	444	251	238
Private . . . . .	580	224	212
Type			
Research . . . . .	102	102	97
Doctorate . . . . .	96	96	91
Comprehensive . . . . .	501	154	145
Liberal arts . . . . .	325	123	117
<b>Sociology</b>			
Total . . . . .	1,174	529	502
Control			
Public . . . . .	475	261	249
Private . . . . .	699	268	253
Type			
Research . . . . .	98	98	94
Doctorate . . . . .	95	95	92
Comprehensive . . . . .	534	164	157
Liberal arts . . . . .	447	172	159

\*Universe sizes are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, the breakouts by school characteristics may not equal the total.

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

Table B-3. Selected standard errors by institutional characteristics: United States

Question	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Percent of institutions conferring bachelor's degrees							
Estimate . . . . .	90.3	95.6	86.6	98.9	97.8	93.6	82.8
Standard error . . . . .	1.3	1.3	2.0	*	*	1.7	2.9
Percent of institutions in which respondents rated the academic preparation of freshmen as poor							
Estimate . . . . .	31.9	43.1	24.3	19.6	25.0	39.0	27.4
Standard error . . . . .	2.1	3.1	2.7	*	*	3.9	2.9
Percent of institutions in which respondents rated the opportunity for undergraduate research as good							
Estimate . . . . .	55.6	54.8	56.2	63.7	71.4	55.3	50.9
Standard error . . . . .	1.6	2.5	2.1	*	*	2.8	2.5
Percent of institutions in which respondents rated the recruiting and retention of qualified faculty as good							
Estimate . . . . .	56.7	51.6	60.2	66.3	68.9	52.6	56.9
Standard error . . . . .	3.0	4.4	4.1	*	*	5.8	3.5
Percent of institutions with computer equipment located within the department							
Estimate . . . . .	37.1	40.3	34.9	57.4	47.8	42.5	23.8
Standard error . . . . .	1.6	2.1	2.3	*	*	2.8	2.6
Percent of institutions in which respondents rated the quality of departmental computer equipment as good							
Estimate . . . . .	59.3	62.8	56.6	69.8	74.8	54.6	57.1
Standard error . . . . .	4.2	5.9	6.2	*	*	7.8	5.4
Percent of institutions in which respondents indicated that the number of sociology majors has increased over the last 5 years							
Estimate . . . . .	56.4	68.2	47.4	76.4	75.4	53.7	49.9
Standard error . . . . .	1.7	3.3	1.7	*	*	2.9	2.6
Total number of sociology courses taught							
Estimate . . . . .	19,257.4	10,601.3	8,656.1	3,185.0	2,121.7	9,529.2	4,422.5
Standard error . . . . .	508.5	175.4	477.0	*	*	426.0	277.6

Table B-3. Selected standard errors by institutional characteristics: United States (continued)

Question	Total	Control		Type			
		Public	Private	Research	Doctoral	Comprehensive	Liberal arts
Total number of full-time faculty teaching sociology							
Estimate . . . . .	7,066.3	4,346.3	2,719.9	1,713.6	927.1	3,234.1	1,191.6
Standard error . . . . .	96.8	56.5	78.8	*	*	74.3	62.1
Total number of full-time faculty teaching sociology to undergraduates							
Estimate . . . . .	6,592.3	4,014.5	2,577.7	1,436.1	868.3	3,153.2	1,134.7
Standard error . . . . .	97.3	66.1	71.6	*	*	81.8	52.7

\*The estimated standard error is zero for research and doctoral institutions, because all research and doctoral institutions were included in the sample with certainty. However, the bias component, which cannot be estimated with standard errors, contributes to the total error because of nonresponse adjustments. The total error will be very small, because the amount of nonresponse is very small (see Appendix Table B-1).

SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

For categorical data, relationships between variables with two or more levels have been tested in a two-way analysis, using chi-square tests at the 0.05 level of significance, adjusted for average design effect. If the overall chi-square test was significant, it was followed with tests using a Bonferroni t statistic, which maintained an overall 95 percent confidence level or better. Unless noted otherwise, all comparisons made in this report were statistically significant using these tests.

Survey estimates are also subject to errors of reporting and errors made in the collection of the data. These errors, called nonsampling errors, can sometimes bias the data. While general sampling theory can be used to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure and usually require that an experiment be conducted as part of the data collection procedures or the use of data external to the study.

Nonsampling errors may include such factors as differences in the respondents' interpretation of the meaning of the questions, differences related to the particular time the survey was conducted, or errors in data preparation. During the design of the survey and survey pretest, an effort was made to check for consistency of interpretation of questions and to eliminate ambiguous items. The questionnaire was pretested with respondents like those who completed the survey, and the questionnaire and instructions were extensively reviewed by the National Science Foundation. Manual and machine editing of the questionnaires were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone; data were keyed with 100 percent verification.

## Relationships of Institutional Characteristics

The data in this report are presented as "total" figures, which represent all kinds of four-year institutions grouped together, and for institutions broken down by institutional control and "type." Historically black colleges and universities were placed in their appropriate institutional control and type for analyses. These classifications are as follows:

- Institutional control
  - Public
  - Private
- Institutional type (based on the 1987 Carnegie classifications, which groups institutions into categories on the basis of the level of degree offered and the comprehensiveness of their missions)
  - Research universities: offer a full range of baccalaureate programs, are committed to graduate education through the doctorate, and give high priority to research.

- Doctorate-granting universities: offer a full range of baccalaureate programs, and are committed to graduate education through the doctorate.
- Comprehensive universities and colleges: offer baccalaureate programs, award more than half of their baccalaureate degrees in two or more occupational or professional disciplines, enroll at least 1,500 students, and frequently also offer graduate education through the master's degree.
- Liberal arts colleges: are primarily undergraduate colleges, and award more than half of their baccalaureate degrees in liberal arts fields.

As can be seen in Figures B-1 and B-2, these institutional characteristics are related to each other:

- Among research universities, 68 percent are public.
- Among doctorate-granting universities, 59 percent are public.
- Among comprehensive colleges, 55 percent are public.
- Among liberal arts colleges, 94 percent are private.
- Among nonspecialized four-year public colleges and universities, 66 percent are comprehensive colleges, and 27 percent are about evenly split between research and doctorate-granting universities.
- Among nonspecialized four-year private colleges and universities, 61 percent are liberal arts colleges and 30 percent are comprehensive colleges.

Figure B-1. Percentages of each type of nonspecialized four-year colleges and universities that are public and private

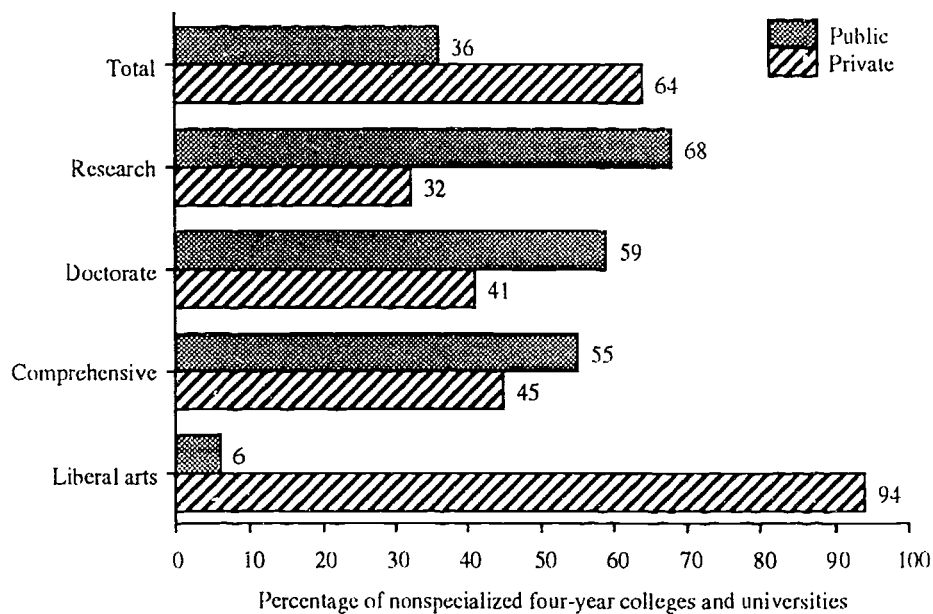
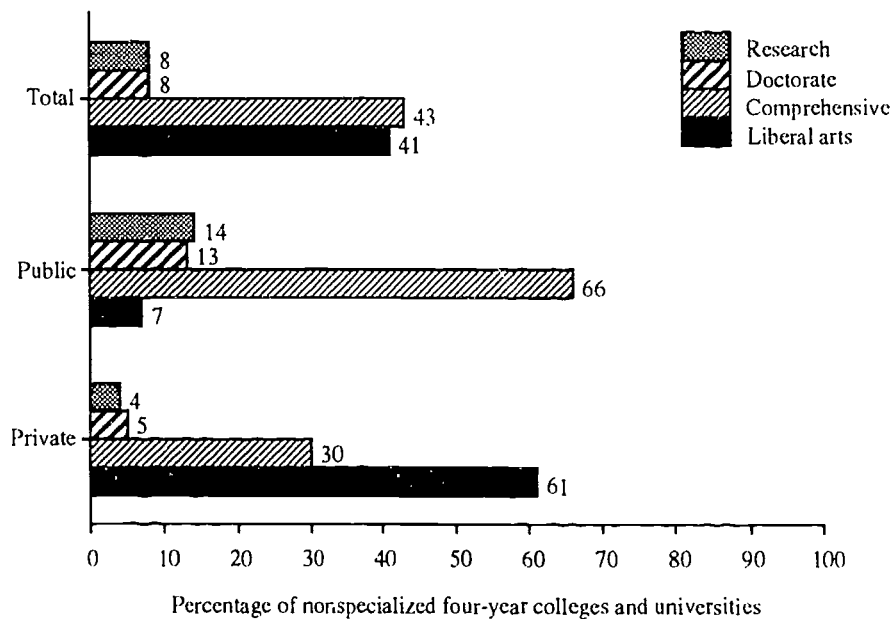


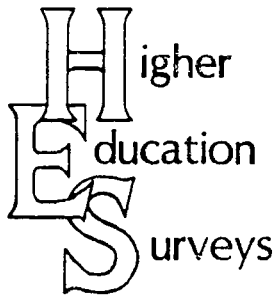
Figure B-2. Percentages of public, private, and all nonspecialized four-year colleges and universities that are research, doctorate, comprehensive, and liberal arts colleges



SOURCE: Higher Education Surveys, Survey on Undergraduate Education in Sociology (HES 15), National Science Foundation, 1992 (survey conducted in 1991).

# **APPENDIX C**

## **Survey Questionnaire**

**SURVEY ON UNDERGRADUATE EDUCATION  
IN SOCIOLOGY**

March 1991

Dear Colleague:

On behalf of the National Science Foundation (NSF), we would like to invite you to participate in this Higher Education Survey of undergraduate sociology departments. This survey is the first in a series of Higher Education Surveys of selected science and engineering departments, which will capture information on undergraduate science and engineering in the Nation's universities, four-year and two-year colleges.

The National Science Foundation is now actively involved in programs to promote improvements in the quality of undergraduate education in science and engineering. In order to effect these improvements, national data on a wide variety of topics in this critical area are needed. The data developed in this survey will provide up-to-date information to planners and policy makers in education, government, and industry for decision-making which is so critical to the strength of the Nation and to us all.

This survey represents NSF's first effort to gather information, nationally, on a number of important topics in undergraduate science and engineering education. Your participation in the survey, while voluntary, is vital to the development of a national picture of undergraduate science and engineering.

The survey is being conducted for NSF as part of the Higher Education Surveys (HES) system. The data are being collected by the HES contractor, Westat, Inc., located in Rockville, Maryland. A copy of the report, summarizing the results of the survey, will be sent to your institution after this study is completed. If you have any questions about this survey, please call Dr. Laurie Lewis at Westat's toll-free number, 800-937-8281.

Thank you very much for your assistance. We look forward to your helping us with this important project.

Sincerely,

Handwritten signature of Robert F. Watson in cursive.

Robert F. Watson, Ph.D.  
Director, Division of Undergraduate Science,  
Engineering, and Mathematics Education  
National Science Foundation

Handwritten signature of Roberta Balstad Miller in cursive.

Roberta Balstad Miller, Ph.D.  
Director  
Division of Social and Economic Science  
National Science Foundation



**HIGHER EDUCATION SURVEYS (HES)  
SURVEY ON UNDERGRADUATE EDUCATION IN SOCIOLOGY**

To the Chair of the Department of Sociology, or the department that offers a program in sociology.

**DEFINITION:** Sociology includes all courses listed in your college catalog that are part of your undergraduate sociology program. For example, if anthropology courses are part of your undergraduate sociology program, they should be included in sociology. If they are not part of your undergraduate sociology program, anthropology should not be included in sociology.

**I. Department Organization**

1a. Does your department have a separate program for any disciplines in addition to sociology (e.g., a separate program in anthropology or social work)?

- Yes (GO TO QUESTION 1b)  
 No (GO TO TOP OF PAGE 2)

1b. **IF YES TO Q1a:** For each discipline besides sociology for which your department has a separate program, list the discipline, and indicate whether your department offers undergraduate courses, confers bachelor's degrees, or confers graduate degrees in that discipline. (Do not include interdisciplinary programs and institutes.)

Discipline	Offers undergraduate courses		Confers bachelor's degrees		Confers graduate degrees	
	Yes	No	Yes	No	Yes	No
	Yes	No	Yes	No	Yes	No
	Yes	No	Yes	No	Yes	No
	Yes	No	Yes	No	Yes	No
	Yes	No	Yes	No	Yes	No

For all questions that follow, please provide information only for sociology as defined in the box at the top of the questionnaire. If it is not possible to separate information for sociology from the programs for the other disciplines offered by your department (i.e., those disciplines listed in Question 1b), please report information for your entire department as necessary, and indicate how you have responded for sections II, V, VI, and VII.

2. For each of the following types of degrees, indicate by circling "yes" or "no" in Column A whether your department confers that degree in sociology.

For each type of sociology degree conferred, indicate in Column B the number of sociology degrees conferred through your department in academic year 1989-90 (September 1989 through August 1990). If no sociology degrees of that type were awarded in academic year 1989-90, enter zero.

Type of degree	A.		B. Number of sociology degrees conferred through department in academic year 1989-90
	Does department confer sociology degrees of this type?		
a. Associate	Yes	No	
b. Bachelor's	Yes	No	
c. Master's	Yes	No	
d. Doctorate	Yes	No	

3. On which calendar system does your school operate? (CHECK ONE)

- Semester  
 Quarter  
 Other (PLEASE SPECIFY: \_\_\_\_\_)

## II. Undergraduate Education - Issues and Concerns

The responses to Q4 are for: (CHECK ONE)

- Sociology only  
 Sociology plus the other disciplines (listed in Question 1b) offered by this department

4. In **Column A**, please rate on a scale from 1 to 5 (with 1 = very poor to 5 = very good ) the following aspects of undergraduate sociology education in your department. If the item is not applicable to your department (e.g., you do not have teaching assistants), circle a zero (0) for that item.

In **Column B**, rank up to 5 items that present the greatest problems for undergraduate sociology education in your department, and write the rank, with "1" indicating the greatest problem, "2" indicating the second greatest problem, etc. If there are no problems in your department, check here  and skip Column B.

Aspects of undergraduate education in sociology	A. (Circle one for each item)						B. Rank up to 5 problems (from this page)
	Not applicable 0	Very poor 1	2	3	4	Very good 5	
<b>a. Students</b>							
1. Academic preparation of entering freshmen.....	0	1	2	3	4	5	_____
2. Student interest and motivation.....	0	1	2	3	4	5	_____
3. Computer background of students.....	0	1	2	3	4	5	_____
<b>b. Curriculum</b>							
1. Quality of introductory textbooks.....	0	1	2	3	4	5	_____
2. Quality of advanced textbooks.....	0	1	2	3	4	5	_____
3. Opportunity for undergraduate research through independent study or advanced coursework.....	0	1	2	3	4	5	_____
<b>c. Faculty/staff resources</b>							
1. Appropriateness of class size for introductory courses ....	0	1	2	3	4	5	_____
2. Appropriateness of class size for advanced courses.....	0	1	2	3	4	5	_____
3. Recruiting and retention of qualified faculty.....	0	1	2	3	4	5	_____
4. Language abilities of faculty members whose first language is not English.....	0	1	2	3	4	5	_____
<b>d. Teaching assistants (include both graduate and undergraduate T.A.s if applicable)</b>							
1. Availability of teaching assistants .....	0	1	2	3	4	5	_____
2. Quality of teaching assistants.....	0	1	2	3	4	5	_____
3. Language abilities of teaching assistants whose first language is not English.....	0	1	2	3	4	5	_____
<b>e. Other (please specify below)</b>							
1. Other _____	0	1	2	3	4	5	_____
2. Other _____	0	1	2	3	4	5	_____

**III. Computer Resources**

5. Is there computer equipment located within your department to which undergraduate students have access for undergraduate research and coursework? Do not include terminals linked to the campus-wide computer facility.

- Yes
- No (SKIP COLUMN A OF QUESTION 7)

6. Is there campus-wide computer equipment at your institution to which undergraduate students have access for undergraduate research and coursework?

- Yes
- No (SKIP COLUMN B OF QUESTION 7)

7. Please rate on a scale from 1 to 5 (with 1 = very poor to 5 = very good) the following aspects of the computer resources available to undergraduate students at your institution for undergraduate research and coursework.

In **Column A**, rate the computer resources located within your department to which undergraduate students have access for undergraduate research and coursework. If your department does not have such computer equipment, circle zero (0). Do not include terminals linked to the campus-wide computer facility.

In **Column B**, rate the campus-wide computer resources at your institution to which undergraduate students have access for undergraduate research and coursework. If your institution does not have such campus-wide computer equipment, circle zero (0).

Computer resources for undergraduates	A. Departmental resources (Circle one for each item)						B. Campus-wide resources (Circle one for each item)					
	Not appli- cable	Very poor				Very good	Not appli- cable	Very poor				Very good
	0	1	2	3	4	5	0	1	2	3	4	5
1. Quality of computer equipment.....	0	1	2	3	4	5	0	1	2	3	4	5
2. Amount of computer equipment...	0	1	2	3	4	5	0	1	2	3	4	5
3. Quality of space for computer use.	0	1	2	3	4	5	0	1	2	3	4	5
4. Amount of space for computer use	0	1	2	3	4	5	0	1	2	3	4	5
5. Quality of software for undergraduate instruction.....	0	1	2	3	4	5	0	1	2	3	4	5
6. Quality of software for <u>undergraduate</u> research .....	0	1	2	3	4	5	0	1	2	3	4	5
7. Other (please specify below)												
a. Other_____	0	1	2	3	4	5	0	1	2	3	4	5
b. Other_____	0	1	2	3	4	5	0	1	2	3	4	5

**IV. Academic Majors**

If this department does not confer bachelor's degrees in sociology, check here  and skip to Question 11.

8. By what point in their undergraduate academic career do students majoring in sociology have to formally declare a major? (CHECK ONE)

- At the time of application for admission to your institution
- By the end of the first academic year
- By the end of the second academic year
- By the end of the third academic year
- Other (PLEASE SPECIFY: \_\_\_\_\_)

9. Over the last 5 years, has the number of students who declared a major in sociology at your institution: (CHECK ONE)

- Increased
- Stayed about the same
- Decreased

10. In your opinion, what are the most important reasons that college students who are interested in majoring in sociology decide not to major in sociology?

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11. What is the single most important thing the National Science Foundation (NSF) can do to improve undergraduate education in sociology?

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V. Undergraduate Course Offerings

The responses to Q12 are for: (CHECK ONE)

- Sociology only
- Sociology plus the other disciplines (listed in Question 1b) offered by this department

12. In Fall 1990, how many different undergraduate and graduate sociology courses, as identified by course title or number, were taught in your department?

**Number of courses:** Provide the number of separate, for-credit courses (as identified by course title or number), not the number of sections.

**Lower division courses:** For-credit courses designed for undergraduates in the first two years of a four-year curriculum.

**Upper division courses:** For-credit courses designed for undergraduates during the third and fourth years of a four-year curriculum.

**Joint level courses:** If a course is a joint undergraduate and graduate level course, count it as an undergraduate level course.

- (a) Total graduate and undergraduate sociology courses (not sections) \_\_\_\_\_
- (b) Total graduate sociology courses (not sections) \_\_\_\_\_
- (c) Total undergraduate sociology courses (not sections) \_\_\_\_\_
- (d) Lower division sociology courses \_\_\_\_\_
- (e) Upper division sociology courses \_\_\_\_\_

(Check here if you cannot provide separate figures for lower and upper division sociology courses )

**NOTE:** The total graduate courses (b) plus the total undergraduate courses (c) should equal the total courses (a). The total lower division courses (d) plus the total upper division courses (e) should equal the total undergraduate courses (c).

**VI. Instructional Staff**

The responses to Q13-Q16 are for: (CHECK ONE)  
 Sociology only  
 Sociology plus the other disciplines (listed in Question 1b) offered by this department

13. In each category of instructional staff below, in **Column 1** indicate the total number of people who taught at least one sociology course in your department in Fall 1990, and in **Column 2** indicate the number who taught at least one sociology course to undergraduates in Fall 1990.

- Consider a teacher full-time if he/she had full-time teaching/research/administrative responsibilities within your institution in Fall 1990.
- Count visiting faculty under the rank they have at their home institutions.
- Exclude members of your faculty who were on leave in Fall 1990.
- For teaching assistants, include both graduate and undergraduate students who are teaching assistants, if applicable.

Instructional staff	Sociology teachers in Fall 1990	
	1. Total number teaching sociology	2. Number who taught sociology to <u>undergraduates</u>
a. Full-time faculty, total		
1. Full professor		
2. Associate professor		
3. Assistant professor		
4. Lecturer or instructor		
5. Unranked		
b. Part-time faculty, total		
c. Teaching assistants, total		
d. Other (please specify):		

14. In Fall 1990, what percent of the total undergraduate instructional contact hours (lecture, laboratory, discussion group) in your department was taught by full-time faculty, part-time faculty, teaching assistants, and other kinds of instructors?

Instructional staff	Percent
a. Full-time faculty	%
b. Part-time faculty	%
c. Teaching assistants	%
d. Other (please specify):	%
<b>TOTAL</b>	<b>100%</b>



15. For those full-time and part-time faculty who taught sociology to undergraduates in Fall 1990 (question 13, column 2, rows a and b), please indicate their highest degree.

Highest degree	Number who taught sociology to undergraduates	
	Full-time faculty	Part-time faculty
Doctorate		
Master's		
Bachelor's		
Other (please specify):		

TOTAL:

(should equal Q13,  
column 2, row a)

(should equal Q13  
column 2, row b)

16. For those full-time and part-time faculty who taught sociology to undergraduates in Fall 1990 (question 13, column 2, rows a and b), please indicate their racial/ethnic group and gender.

Racial/ethnic group (see definitions below)	Full-time		Part-time	
	Men	Women	Men	Women
Non-resident aliens				
U.S. citizens and permanent residents:				
Black, non-Hispanic				
White, non-Hispanic				
Hispanic				
Asian or Pacific Islander				
American Indian or Alaskan Native				

TOTAL:

(should equal Q13,  
column 2, row a)

(should equal Q13,  
column 2, row b)

**Racial/ethnic group**

**Non-resident alien:** A person who is not a citizen of the United States and who is in this country on a temporary basis and does not have the right to remain indefinitely.

**Black, non-Hispanic:** A person having origins in any of the black racial groups in Africa, excluding persons of Hispanic origins.

**White, non-Hispanic:** A person having origins in any of the original peoples of Europe, North Africa, or the Middle East, excluding persons of Hispanic origins.

**Hispanic:** A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

**Asian or Pacific Islander:** A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.

**American Indian or Alaskan Native:** A person having origins in any of the original peoples of North America and maintaining cultural identification through tribal affiliation or community recognition.



**VII. Teaching Assistants**

If there were no teaching assistants in your department in Fall 1990, check here  and skip to the next page.

The responses to Q17-Q22 are for: (CHECK ONE)

- Sociology only  
 Sociology plus the other disciplines (listed in Question 1b) offered by this department

17. Please indicate below the percent of teaching assistants in your department in Fall 1990 who are graduate students and undergraduate students. Enter zero (0) if there were no teaching assistants of that type in Fall 1990.

- a. Teaching assistants who are graduate students: \_\_\_\_\_ %  
b. Teaching assistants who are undergraduate students: \_\_\_\_\_ %

TOTAL 100%

18. Do the teaching assistants in your department:

- |                                 |                              |                             |
|---------------------------------|------------------------------|-----------------------------|
| a. Lecture on a regular basis?  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Lecture occasionally?        | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Conduct laboratory sections? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Conduct discussion groups?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Grade tests and papers?      | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. Hold office hours?           | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

19. How many laboratory sections and/or discussion groups does a teaching assistant in your department usually lead in a term (semester, quarter, etc.)? \_\_\_\_\_

20. Does your institution or department offer a course or seminar to enhance the teaching and communication skills of teaching assistants in your department?

- Yes (ANSWER QUESTIONS 21 AND 22)  
 No (SKIP QUESTIONS 21 AND 22)

21. What is the content of this course or seminar? (CHECK ALL THAT APPLY)

- Teaching techniques  
 Preparation of course materials  
 Techniques for student academic or career advising  
 English language skills  
 Familiarization with American customs and behaviors  
 Other (PLEASE SPECIFY: \_\_\_\_\_)

22. Are all teaching assistants in your department required to take this course or seminar? (CHECK ONE)

- All teaching assistants are required to attend  
 Only some teaching assistants are required to attend  
 No teaching assistants are required to attend

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Do we have permission to release these data to the National Science Foundation with your institutional identification code? This would allow NSF to use data from other surveys to help analyze the results. All information published by NSF will be in aggregate form only.

- Yes  
 No

Please sign \_\_\_\_\_

Thank you for your assistance. Please return this form by March 22 to:

Higher Education Surveys  
WESTAT  
1650 Research Boulevard  
Rockville, MD 20850

Person completing this form:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Department name: \_\_\_\_\_

Telephone: \_\_\_\_\_

**Please keep a copy of this survey for your records.**

If you have any questions or problems concerning this survey, please call the HES Survey manager at Westat:

Laurie Lewis  
(800) 937-8281 (toll-free)

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